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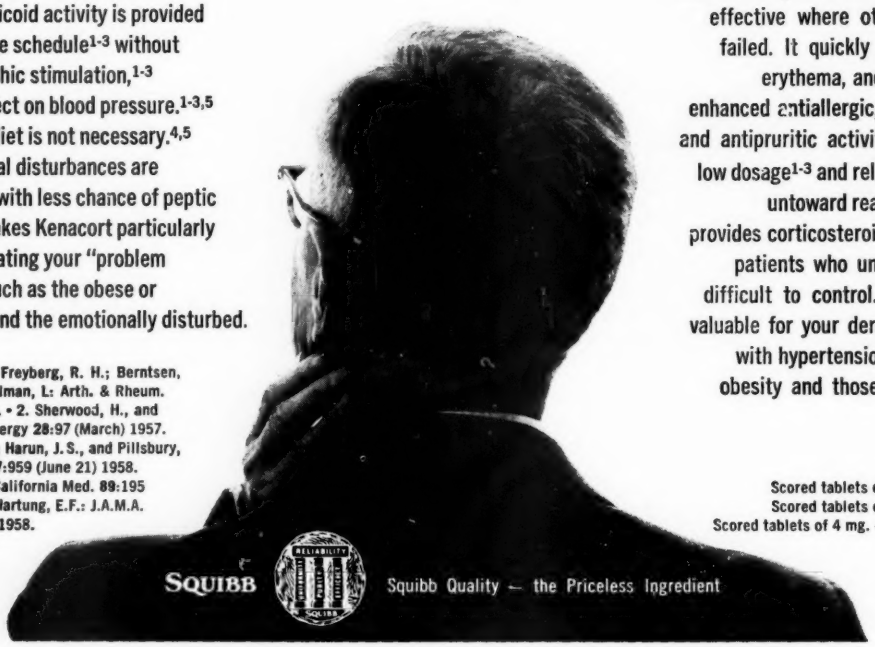

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Alaska Medicine

Vol. 1, No. 1 MARCH, 1959

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Volume 1, Number 1

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Editorial Office—423 D Street
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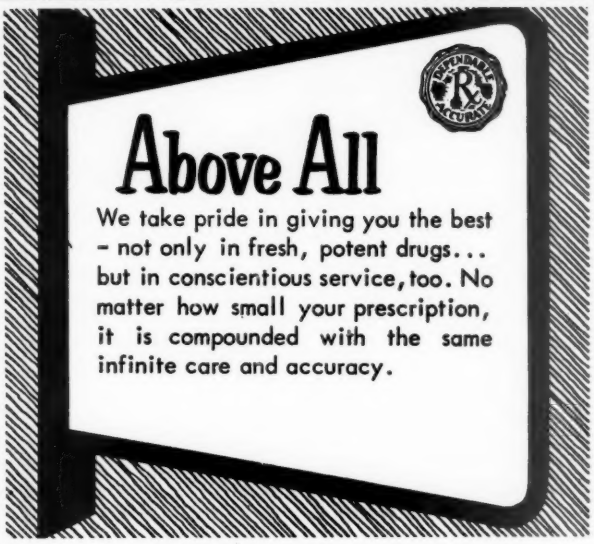
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"Alaska Medicine"

A Report to the Committee

In May 1958, at the last Territorial Medical Association meeting, Fairbanks, Alaska, a committee was appointed to investigate the professional and economic feasibility of publication of an Alaskan Medical Journal.

Since the only adequate demonstration of feasibility appeared to be the actual publication of such a journal, we have used this means as a method of report to the committee. Therefore, to Dr. William Whitehead, Chairman of the Committee and our first State Association President, and to Dr. Hugh Fate, then retiring Territorial Medical Association President, who appointed the committee, and to the members of the Alaska State Medical Association, we submit for review and approval, Vol 1, No. 1 of **Alaska Medicine**, a result of effort and enterprise of the private physicians of Alaska.

To the physicians, to our advertisers, and to all others, through whose time, efforts and financial support this has been made possible, this issue is dedicated.

Many have long felt the need of an Alaskan journal. Through this medium, medical communication in this vast area will expand. Our far flung medical communities, from Ketchikan to Barrow, from the Interior to the Bering Sea and the Westward, will be gathered closer into the growing Alaska medical future.

Alaska medical problems, peculiar in so many ways to our arctic and subarctic ecology, may now be aired, interpreted, reviewed, discussed and we trust, solved by Alaskan physicians.

With this journal, better understanding and rapport may be gained with the Medical Departments of the Armed Forces in Alaska, with the United States Public Health Service, and with other federal and state agencies. And as a unit, our Association's voice will remind those in our own state government, and our representatives in Washington, that Alaskan physicians intend constant interest in the new State's affairs, particularly those bearing on the field of Health.

Alaska Medicine, by its demonstration of need, may hasten ideas to further the birth and growth of vitally needed medical programs in our new State, and continue existing plans for centers of rehabilitation, mental health, and research, and one day, perhaps, encourage the development of Schools of Nursing, or other schools of medical education and postgraduate training, all to provide more inclusive and advanced medical care for Alaskans.

We are given the opportunity now to insure that no longer need the unrecorded medical voice be sent plaintively wailing across the waters of the Inland Passage, to quiver in the Susitna Flats, or be sent rumbling toward the peaks of Mt. McKinley, only to wither and be dissipated in the Wilderness.

Not least of all, through its pages, our younger physicians may be encouraged further to develop medical literary skill, in contributing, from Alaska, to the field of Medical Science, and our elder medical colleagues may be encouraged to lend this new State, with its many young physicians, the leadership and knowledge that only experience and years of practice can provide.

And most important, may our journal provide us with such content, that from its pages we can continue the process of learning, and develop further the process of thinking. We hope by its quality and purpose, that someday, physicians elsewhere, as have navigators for centuries, will look upward, and to the North, to Polaris and to the Forty-ninth Star, and in those latitudes find light.

Respectfully submitted,

WILLIAM JAMES MILLS, Jr., M.D.

for Committee, "Alaska Medicine", March, 1959

Editorial - -

"ALASKA MEDICINE", Origin and Future

At first thought it might seem overly ambitious for Alaska with scarcely one hundred practicing physicians to have a state medical journal. Many states with physicians numbering in the thousands do not have a medical publication. Cogent reasons exist, however, for us to have our own journal. There is a pressing need for communication among the handful of physicians in Alaska, the largest state. The extremes of arctic and sub-arctic weather present special medical problems not encountered in the "south 48" states. The responsibilities of newly acquired statehood present organizational issues directly affecting physicians and their patients, issues which would be worthy of discussion in our own medical publication.

Perhaps equally strong arguments could be marshalled to argue that it would be infeasible for Alaskans to have a medical journal. How can such an undertaking be financed? Can one hundred physicians contribute sufficient material of medical interest to justify a regular publication?

The ultimate test of the feasibility of any undertaking is to go ahead and do it. This was the reasoning of Dr. William J. Mills, member of the committee appointed last March, to investigate the possibility of having a journal. In response to his initiative and enthusiasm physicians of Alaska have contributed their time and talents to make ALASKA MEDICINE a reality. Sufficient advertising has been obtained to more than underwrite the cost of publication. Thus, this first issue is being distributed free of charge to all physicians in Alaska and to all medical school libraries and state medical societies in the United States, and a comfortable sum remains for operating capital to support work on subsequent issues. The response from our membership has been similarly gratifying. So many medical articles have been submitted that it has not been possible to publish all in the first issue. Enough material is presently in hand, or promised, to make an ample second issue.

Although the question of adequate financial and medical support clearly has been answered in the affirmative, many questions remain. First of all, how frequently should **Alaska Medicine** be published? The extremes of once a month to once a year were considered, and it was the present editorial board's opinion that quarterly publications would be most reasonable and realistic. A yearly publication would lose continuity whereas a monthly issue seemed more frequent than necessary to meet our needs.

What should editorial policy be towards the quality and style of material to be published? It was felt that within wide limits approximately half of the material should be of organizational nature whereas the other half should be in the nature of medical reports. Should the editorial board set up a strict requirement for form of the medical reports as is done in most other American medical publications? Should we insist that all medical articles be submitted in the formal style in vogue today with **introduction** followed by **methods, results, discussion,** and then **summary and conclusions?** It was the opinion of the editorial board that policy in this regard should be broad. For example, the interesting, informative and very readable article by Dr. A. N. Wilson regarding the etiology of a Salmonella outbreak in Ketchikan certainly would not benefit by editorial insistence on adherence to form. On the other hand, Dr. Crawford's informative report on chickenpox pneumonia conforms to good advantage to the current style of medical reporting. It could well serve as a model for the majority of future medical reports. Dr. Fritz's enjoyable autobiographical sketch, it is hoped, will serve as a stimulus to other Alaska physicians to tell of their experiences in the practice of medicine. To sum up editorial policy, it is felt that the basic purpose of this journal should be to stimulate and increase communication among physicians in Alaska.

Many suggestions and contributions already have been received for consideration as permanent features of **Alaska Medicine.** An excellent clinical-pathological conference is in hand but has not been

included in the first issue because of space limitations. A CPC of this calibre could well be a regular feature of the journal. A column devoted to news and current activities has been submitted and certainly should be a regular feature. Contributing editors from each of the widely separated medical communities could keep Alaskan physicians up to date with the "goings-on" in their own and other areas. An invited review article by well-known physicians and educators outside of Alaska could well be a regular feature which would add to the educational aspects of the journal. Certainly a section devoted to the history of medicine in Alaska should be one of the important features of each edition. Along this line we could include biographical sketches of physicians now actively practicing medicine in Alaska. Through this feature newcomers to Alaska medicine could meet their colleagues regardless of the distances separating them.

One important feature which is missing from this first issue is a "Letters to the Editor" column. This is a "must" if the journal is to reflect the ideas and opinions of Alaska physicians. It is hoped that criticism of our new journal, along with constructive suggestion, will be forthcoming from all areas of Alaska. In this way, and in this way only, can each issue show improvement.

It is the hope of the present editorial board that this initial effort has been worthy of your support and acceptance so that future editions will read **"Alaska Medicine, official publication of the Alaska State Medical Society."**

WILLIAM O. MADDOCK, M.D.

Editor, Volume I, Number 1, ALASKA MEDICINE

President's Page

W. M. WHITEHEAD, M.D., President

ALASKA STATE MEDICAL ASSOCIATION 1958-59

Writing this President's Page puts me in a unique position. When I was first elected President of our Association in 1944, we did not have an official Journal, and it was partially through my efforts that "Northwest Medicine" was selected as our official Journal. Now during my second term as your President, we are considering the possibility of having our own official State Journal. There are many things that we must take into consideration—first would be the advantages, and secondly the disadvantages.

Actually we have come a long way in a period of a few years. When I was elected President in 1944, I elected myself! There were no meetings and the elections were held by mail—voting for whom you wanted as President and Secretary. Dr. Wm. P. Blanton, of Juneau, was the permanent Secretary, as he was reelected each year. That particular year Dr. Noble Dick, formerly of Fairbanks, had one vote and I had one vote, so I told Dr. Blanton I would vote for myself, because I was interested in getting Northwest Medicine as our official Journal. Therefore, I cast the tie-breaking vote for myself.

In 1946 we had our first organized meeting here in Juneau with Dr. A. N. Wilson, of Ketchikan, as our President. A lot of credit for this organized meeting must be given to Dr. C. Earl Albrecht, who was then Commissioner of Health. He was traveling a lot throughout the Territory and was able to contact the physicians, who showed much enthusiasm for the get-together. It was at this meeting that we were able to get the present Basic Science Law passed. Without the airplane travel we would not have been able to become organized.

We have led the way, for this meeting proved to the Dentists and Lawyers that such an organization was worthwhile. It was soon after this that they began having such meetings of their own. Maybe we will lead the way again and the other professions will have their own Journals.

We are growing up! We have changed from Territorial status to that of a great State. Progress cannot be made by standing still. There are many advantages of a Journal of our own. It will afford us the opportunity of becoming better acquainted with each other. It will give the individual physician a much broader knowledge of what is going on medically within his State. It will encourage each of us to write articles for his Journal. It will give us greater publicity within the world of medicine—provided we do a good job. It will keep us better organized. Of all professions I believe the medical is the most difficult to obtain unanimity of opinions. In a nutshell, it will make us better physicians.

As far as I am able to see, there are only two disadvantages. The first is the enormous amount of work required in getting the Journal out. The second is the cost. A Journal can survive only by the advertisers and subscribers. I feel that we will be able to get our proportion of advertisers. Our subscription rate will probably be low, yet at the same time our membership dues are low. I venture to say that every State in the Union has higher membership dues than we do.

As your President I trust that you will give this matter serious consideration. I would like to extend to Dr. William J. Mills Jr., and his committee of Anchorage, my warmest thanks for their tremendous efforts.

Commissioner's Report

HARRY V. GIBSON, M.D.
COMMISSIONER OF HEALTH—STATE OF ALASKA

Congratulations and success from the Alaska Department of Health to "Alaska Medicine" the new Alaska medical journal. Its birth marks a great forward step in Alaskan medical affairs, and its maturity will enable a development and synthesis of medical opinions among Alaskan members of medical disciplines which is a rarity under such circumstances. Professional education and interagency as well as personal relationships will be greatly improved. A continuity of liaison will help nullify the present disadvantages of long distances and expensive transportation, both of which severely retard statewide meetings and personal contacts.

The Department of Health anticipates and welcomes an opportunity to help establish through this journal a much closer relationship with the practicing physicians of Alaska and in turn to be able to work more effectively in promoting and protecting the health of Alaskan citizens. A professional voice which is authoritative for Alaskan physicians will enable the Department of Health to have a testing area for measuring its success as viewed by the medical world, and thus enable it to take early corrective action on unsatisfactory programs. The new journal will enable the Department to place before all Alaskan physicians reports on statistical findings and upon progress in public health fields which will highlight and bring into focus both preventive medical problems and available or needed public health resources to meet them. This in turn will lead to mutual understanding of problems and answers which will promote harmony and good morale and lead to more and better results. One has only to recall past periods of recrimination and distrust to realize the benefits of closer understanding and agreement between public health and private practice physicians. The ultimate gain is by the public in the form of improved services. The reward of satisfaction over a job well done will be the compensation of both medical and public health personnel.

The recognition of necessity for rapid transmission of information has only served to emphasize the professional problems connected with practicing private or public medicine in Alaska. In such an itinerant area it is difficult indeed to apply modern methods as developed in the more densely populated areas of the "smaller states". We need to keep up our own research to develop methods and techniques suitable to Alaska. Constant exchange of experiences and observations is essential. The publication of a journal designed specifically for this purpose provides an ideal medium for such an exchange. There is no great accomplishment by describing in national journals events which are applicable only to so small a segment of the U. S. population as is to be found in Alaska. Conversely to Alaskans there is limited use for knowledge of the special needs of a U. S. population at large. Hence this journal can readily bring into focus Alaskan problems in a manner impossible to accomplish otherwise.

Alaska has many unique problems, such as the highest known death rate from accidents. We have no good knowledge of the disabled ones who didn't die. Infant mortality presents an age-specific characteristic profile not found elsewhere. Racial and cultural barriers and customs lead to epidemiological patterns found only in Alaska. Need for Alaskan rehabilitative programs is great. A rapid development in mental health programs is imminent. Tuberculosis care has shifted from the sanitarium to the home. Dual sets of problems affecting the urban areas and the rural areas require dual patterns of medical and public health practices—all of this in a growing, shifting population governed by a recently transfigured structure of state government combine to present a special need for up-to-date information for all Alaskan citizens and certainly for the medical and public health fields. Certainly no more farsighted answer has been given to meeting these conditions than is offered through "Alaska Medicine" Such enterprise is gratifying to all personnel who will benefit from it. Salute!

BOTULISM IN ARCTIC ALASKA: REPORT OF 13 CASES WITH 5 FATALITIES

*ERWIN S. RABEAU, M.D.**
Division of Indian Health, USPHS
KOTZEBUE

This report concerns the occurrence of botulism in Eskimos in Arctic Alaska. There were five outbreaks in five different years, the last three of which were bacteriologically proved due to **Clostridium botulinum,** Type E. The first two outbreaks were clinically typical but bacteriologically unproved; however, there were three deaths in these two outbreaks. The first outbreak occurred in 1947, involving three persons with two fatalities. The second outbreak in 1948 involved two persons with one fatality. The third outbreak occurred in 1950, involving five persons with no fatalities. The fourth occurred in 1952, involving one person with fatal termination. The fifth outbreak in 1956 involved two persons with one death. The food involved was the same in all thirteen cases—the flippers and skin of the beluga (white whale) preserved in seal oil.

Figure 1. Beached Beluga.

Case Records

Case I: In July 1947, a 55-year-old Eskimo male and his 22-year-old daughter-in-law were admitted to the Kotzebue Alaska Native Hospital because of persistent nausea, vomiting, weakness, and general malaise of four hours duration. Six hours later the 25-year-old son was brought in from a hunting trip with the same complaints. A history was elicited that about 16 hours prior to the onset of symptoms, they had eaten some beluga flipper kept in seal oil.

The beluga, or white whale, **Delphinapterus leucas,** is prepared by cutting the skin with its underlying layer of blubber into chunks (muktuk), drying on a rack for a day or two, then storing it in a barrel of seal oil. It is allowed to age in this fashion for at least four to six weeks.

On admission, temperature, pulse and respiration were all normal. There was no diarrhea. All physical findings were normal except pupillary refexes which were diminished. The nausea and vomiting continued for four to six hours after admission and gradually ceased. Blepharoptosis and diplopia developed. Blurring and dimming of vision were common complaints. Pupils were dilated and fixed, corneal reflexes greatly diminished. About 12 hours after admission, all complained of a dry mouth and sore throat with some difficulty in swallowing. Oral feedings were discontinued and stomach tubes were inserted. There were no bowel movements, little results from enemas, and very few bowel sounds on auscultation, but there was no distention. Peripheral reflexes were diminished but not absent. Weakness persisted and increased with some incoordination of movements. All three patients became progressively worse. Dysphagia became marked (at which point stomach tubes were removed) and intravenous therapy started. Respiratory difficulties became apparent although the lungs were relatively normal on auscultation. As dyspnea increased, oxygen was started. Twenty-four hours after admission the father showed signs of cardiac failure and expired about 34 hours after the onset of symptoms. His death was followed five hours later by that of the girl, whose sensorium remained remarkably clear to the moment of death. As she was almost eight months pregnant, a caesarean section was thought in order if death appeared imminent. The fetal heart rate was 153 on admission and was 120 about four hours prior to death. Due to the sudden demise, however, a section was not done. The 25-year-old male remained in a critical condition with extreme respiratory distress for another 30 hours, then slowly improved. His dyspnea lessened and disappeared but was followed by difficulty in swallowing and phonating. Muscular weaknesss improved on sixth day of hospitalization—pupillary reflexes started to return on the ninth day. Constipation ended on thirteenth day. Ptosis remained for three weeks, and he complained of diplopia for seven weeks before significant improvement was noticed. It was five months before he felt completely well. No sample of the food was recovered as it was destroyed and the barrel burned by the rest of the family when the three had fallen ill.

Case II: In August 1948, a 58-year-old Eskimo male and his 16-year-old son from a fish camp, nine miles away were admitted to Kotzebue with complaints of nausea and vomiting and weakness of seven

* *Present Address: Alaska Native Service Hospital Anchorage.*

hours duration. The father also complained of visual disturbances. He continued to have nausea for 12 hours and severe abdominal pain. The son felt nauseated but had little abdominal distress. History developed that about 12 hours prior to onset of symptoms they had eaten beluga muktuk in seal oil.

The father had eaten three pieces, the boy only one portion. The father's symptoms worsened and he developed marked diplopia and ptosis, dryness of mouth and dysphagia. The son's symptoms were similar but not as severe. They followed a similar pattern of symptoms as noted above in Case I. The father was given 20,000 units of polyvalent A and B antitoxin. As this was all that was available and as the boy had had an acute diffuse upper respiratory infection prior to admission, he was given 600,000 units of penicillin daily. The father's condition deteriorated rapidly, and he expired 54 hours after admission, about 73 hours after the ingestion of the suspected meal. The son's condition remained stable for six days and then started to improve. He was discharged to the outpatient clinic 14 days after admission.

Case III: In August 1950, five Eskimos from Point Hope, 165 miles northwest of Kotzebue, ranging from 18 to 62 years in age, came down with symptoms of nausea and vomiting, diplopia and dysphagia. They were admitted 14 hours after the onset of symptoms which commenced about 20 hours after the ingestion of beluga flipper preserved in seal oil. On admission they had diplopia, dysphagia, loss of pupillary reflexes, with dilated fixed pupils, some generalized muscular weakness and constipation. They were treated symptomatically and with large doses of penicillin, responded well to therapy, and released ten days after admission. Some of the food was obtained this time and forwarded to Dr. W. H. Gaub of the Arctic Health Research Center, Anchorage; later Dr. Karl Meyer demonstrated the presence of **Clostridium botulinum** Type E toxin, but no anaerobe. Subsequently Dr. C. E. Dolman at the University of British Columbia isolated a toxigenic strain of **Clostridium botulinum,** Type E, from the sample.

Case IV: A 63-year-old Eskimo male was brought in from a fishing camp with a history of nausea, vomiting, generalized weakness, visual disturbances and respiratory distress of 22 to 36 hours' duration. Late admission was due to travel by small boat which was hindered by storms. He had eaten dried whale preserved in seal oil about 16 hours prior to onset of symptoms. His condition progressively worsened and death ensued about 24 hours after admission.

Case V: A 41-year-old Eskimo mother and her 8-year-old daughter were admitted with a 20-hour history of malaise, nausea and vomiting about 16 to 18 hours after the ingestion of dried whale fin. Cranial nerve palsies developed rapidly and on the fifth day, respiratory distress increased in both patients. They were placed in respirators. The mother lapsed into coma and expired, but the girl improved and made a gradual, uneventful recovery.

Discussion

The term "botulism" originated from the Latin word **Botulus,** meaning sausage, coined by physicians in Southern Germany in the beginning of the 19th Century (sausage was prepared by packing raw meat in a casing which became airtight on drying). Van Ermengen, in 1896 (Belgium), discovered the organism. These spores have greater heat resistance than any other anaerobe. It was formerly thought that the toxin was formed outside of the body during growth of the bacteria in a preserved food, but recent studies indicate that botulism may not only be an intoxication but also an infection. Types A, B, and E produce botulism in humans, Type C in ducks, and D in cattle.

Action of Toxin:

1. Toxin interferes with synthesis of acetylcholine, or with the release of acetylcholine from terminal fibers of motor nerves (one group says toxin strongly inhibits the enzyme which acetylates choline —another group unable to confirm).

2. There is diminution in response to direct stimulation of muscles.

3. In botulism as contrasted to myasthenia gravis: a) motor nerve tetani are well maintained; b) paralysis unaffected by anticholinesterase agents, potassium, or epinephrine.

4. Botulism prevents the release of acetylcholine without affecting reactivity of the end plate to this substance, whereas curare acts by blocking action of acetylcholine at the end plate without decreasing its release from the motor nerve endings.

Fatality Rates:

United States (1899-1949)	65%
Canada (1919-1953)	56%
Germany	15%
France (during occupation)	2%
Russia	33%
477 outbreaks (1281 cases with 829 deaths)	
14 known outbreaks (63 cases with 35 deaths)	
(Fatality rate mainly Type B)	
More than 1000 cases	
168 cases with 56 deaths (fishborne type)	

Incidence of Symptoms: (See Chart)

1. Nausea and vomiting: Present in all cases of this series, although most authors describe it only occurring in about one-third of the cases and ascribe it to gastrointestinal irritation due to spoilage of food rather than botulinus toxin.

2. Constipation: Obstinate and characteristic —actually bowel paralysis.

3. Abdominal pain and headache: Probably due to same cause as nausea, as botulism is motor dysfunction rather than sensory.

4. Generalized weakness: Very characteristic.

5. Blepharoptosis: Probably occurs more often —may have been missed due to facial characteristics of Eskimos.

6. Diplopia: Characteristic.

7. Loss of pupillary reflexes: Corneal also. Dilation and fixation of pupils. Nystagmus.

8. Dimness and blurring of vision: Due to oculomotor paralysis.

9. Dysphagia: Characteristic.

10. Dryness of mucosa: Inhibition of salivary secretions, combined with paralysis, gives sensation of sore throat and constricted feeling.

11. Aphonia: Paralysis may cause hoarseness or whispering. None in this series had complete aphonia.

12. Dyspnea: Late symptom and of grave portent.

Normal Findings:

1. Temperature: Stays normal or subnormal.

2. Pulse: Normal until late stages, then may become rapid or slow.

3. Respiration: Becomes irregular in late stages, occasionally Cheyne-Stokes type.

4. Hematology: RBC, WBC and differential normal at onset.

5. Blood chemistry: Danish observers report slightly reduced serum potassium levels.

6. ECG: Some extra-systoles, flattening and negative T II, depression of ST segment, probably due to action of toxin on myocardium.

7. Cerebrospinal fluid: Normal.

The Type E strain was first isolated in 1935 by Gunnison, Cumming, and Meyer from sturgeon. Through 1952 there have been ten known episodes of proven Type E botulism. Some form of fish or marine mammal was found in all but one.

Types of marine life in which Type E has been found.

Salmon—Labrador smoked and home-canned British Columbia.

Herring—Pickled British Columbia and Danish, smoked Russian, and vinegared Japanese.

Trout—Home-pickled British Columbia.

Beluga

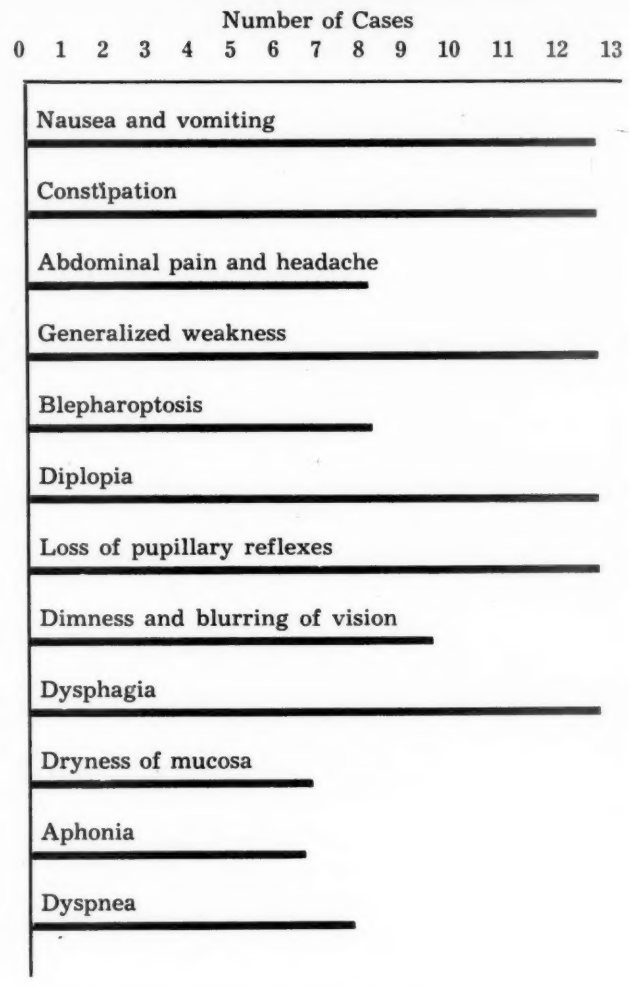
Sprats—German canned.

Russian sturgeon and red fish (no cases have resulted).

French fresh-water perch (no cases have resulted).

Although fish-borne botulism in not necessarily Type E in origin, fish has undoubtedly served as the customary vehicle of Type E botulism. This association seems mainly due to the slight heat resistance of Type E spores, which tends to prevent their survival in even moderately heated foodstuffs. Other possible contributory factors are that Type E toxin is likewise markedly heat-labile and is produced at unusually low temperatures and pH ranges. Also, fish protein may be particularly conducive to toxin production by Type E strains.

INCIDENCE OF SYMPTOMS



Treatment

1. Type-specific antitoxin: There is one commercial Bivalent one (A and B) available and its greatest use is for prophylaxis. No Type E antitoxin is produced commercially.

2. Stomach tube feeding: Necessary due to glosso-pharyngeal paralysis, but in my experience, must be abandoned early because of dyspnea, apprehension, dry mucosa and regurgitation of fluids.

3. Parenteral fluids: Electrolyte balance must be watched. It is usually necessary to give glucose and amino acids. A Danish report mentions shock, and blood and dextran were used in combating it.

4. Clearing of pharynx and bronchi: Aspiration of the nasopharynx is often necessary as there is usually decreased salivary secretion and sometimes thick, ropy, tenacious mucus in throat; also, regurgitation of fluids through nose and mouth occurs.

5. Tracheotomy: Orton describes case of woman who was nearly drowned in her own secretions because of her inability to expel them and made prompt recovery after tracheotomy.

6. Mechanical respirator: When respiratory paralysis occurs, the use of an iron lung may save the patient. Function may begin to return in 5 to 14 days. Bockus mentions use in several cases without success. Cardiac failure may supervene. The use of a respirator probably saved the girl in the last outbreak. It is my belief that cardiac failure on basis of toxic myocarditis, possibly with vagal paralysis, was the immediate cause of death in these cases.

7. Antibiotics: None of the antibiotics exerts any direct effect against the toxin; however, penicillin and tetracycline are the most effective against the bacteria and in our later cases seemed to be of considerable benefit. The use of ACTH in a case of gangrene with dramatic results has been reported. The authors postulated that its action may have been twofold: an antitoxic and nonspecific insulation on the cells which prevents the toxic actions of bacterial products and restoration of vascular tone. Its use should be investigated in botulism.

Summary

1. Five outbreaks of botulism in Arctic Alaska are reported. At Kotzebue in 1947, three persons developed clinically typical botulism and two died; and in 1948 there were two cases with one fatality. In 1950 at Point Hope, five cases of nonfatal botulism occurred and the organism was isolated in some of the remaining food. In 1952, near Selawick, one case occurred with death. In Kotzebue in 1956, two cases with one fatality occurred. In both the last two outbreaks, Type E **Cl. botulinus** was identified.

2. The same foodstuff, beluga (white whale), uncooked, and preserved in seal oil was responsible for all five outbreaks. In three cases, **Cl. botulinus,** Type E, was isolated, and it seems logical to assume that it was probably the factor in the other two.

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Cardiac Arrest

By GEORGE E. HALE, M.D.
ANCHORAGE

Cardiac arrest is a threat to the patients of every practicing physician who uses anesthesia or surgery. A questionnaire which was mailed to every member of the Alaska Medical Society and answered by fifty per cent of those questioned revealed twenty cases. Undoubtedly others have been observed by doctors not reporting. A nationwide survey revealed that arrest occurs once in every 1500 operations excluding thoracic surgery (1). This incidence is sufficiently high to make it mandatory that every practicing doctor have a definite plan of attack in mind in case he is unfortunate enough to encounter this condition. The fact that not more than three to four minutes can elapse between the time the heart is arrested until there is permanent brain damage makes it impossible to successfully treat cardiac arrest without definite previous planning. Even slight delay makes restoration of the patient impossible. It is well established that prompt treatment can produce a good salvage rate (2).

Avoiding asphyxia is of greatest importance in the prevention of cardiac arrest. It is also important to block vagal reflexes with atropine sulfate 1/100 grain in an average adult. Cautious administration of the anesthetic agent in order to prevent overdosage is the third major factor in prevention.

A definite plan of action for cardiac resuscitation should be rehearsed frequently so that it can be put into immediate use when cardiac arrest occurs. The fundamentals of resuscitation are aeration of the patient's lungs, immediate thoracotomy and cardiac massage. Each is useless without the others (3), (4).

The act of cardiac resuscitation consists of five simple steps:

1. Determination of cessation of heart beat and aeration of the lungs.
2. A bold opening of the chest and massage of the heart.
3. Control of fibrillation of the heart if it is found to be present.
4. Closure of the patient's chest.
5. Postoperative medical care.

Determination of the cessation of heart beat and aeration of the lungs is primarily the responsibility of the anesthetist. It is of the greatest importance that the time of arrest be promptly announced and recorded. If the patient is not already intubated, this should be done and the lungs should then be aerated.

When told that death is impending, the surgeon should paplate any large artery for a pulse or listen quickly to the heart if no large artery is available. Ignoring antisepsis, he must boldly make a long incision in the left fourth, fifth or sixth intercostal space. A survey by Bailey failed to reveal a single reported case of empyema or pericarditis from such an unsterile thoractomy (5). If arterial bleeding occurs, it is proof that the heart is not arrested but is only pulsating feebly and the thoracotomy should be discontinued and the heart resuscitated medically. The surgeon should insert his hand behind the pericardium of the heart and squeeze the heart frequently and forcibly against the sternum. The rate of compression of the heart should be from sixty to eighty times a minute if filling is rapid enough to allow this. The force of compression should be enough to completely empty both ventricles and to give a detectable pulse and a blood pressure over seventy millimeters of mercury systolic, if possible. Then a rib spreader or a self retaining retractor should be inserted to relieve compression of the surgeon's wrist. The pericardium should be opened longitudinally in front of the phrenic nerve and the surgeon should pause momentarily and observe whether the heart is in complete standstill or ventricular fibrillation.

If standstill has occurred, if the lungs have been well aerated and if thoracotomy and massage have been prompt, frequently the heart will have resumed normal contractions by this time. If continued mas-

sage does not produce this effect, three to four c.c.'s of 1:10,000 epinephrine should be injected into the right ventricle and massage should be quickly resumed. Injections may be repeated later if necessary alternating with continued massage; and if the desired result is not obtained, a cardiac pacemaker should be used. In my experience, however, the cardiac pacemaker gives disappointing results and sometimes produces ventricular fibrillation.

If fibrillation is found to be present, massage should be continued until the myocardium is pink and then electrical defibrillation should be attempted. Standard defibrillators are available such as those produced by Beck and Rand or by Morris. Usually a 1/10 second shock or series of shocks is given using 110 volt, 60 cycle current with 5-10 amperes. In an emergency any city electrical current will do which is 60-cycle alternating current, and 110 volt. The Pilling Company manufactures electrodes which are plugged into the city current and have been used to good effect. The cost of these is minimal.

If electrical defibrillation is unsuccessful, massage should be continued and after a few shocks or series of shocks, 3 to 4 c.c.'s of 1% procaine may be injected into the right ventricle followed by continued massage and electrical shocking. Other drugs which on occasion have been helpful intravenously are procaine-amide (Pronestyl,) potassium chloride, and calcium chloride or calcium gluconate. If defibrillation is successful the program for cardiac standstill should be instituted as the next step towards normal heart action.

If regular heart rhythm returns, arterial bleeding will soon be noted from the internal mammary and from the intercostal arteries. This should be controlled. It is important not to close the chest too hurriedly since frequently a second arrest may occur and the patient should be in best possible condition before the heart is left without possibility of immediate direct aid. Before closure, atropine, intravenously 1/100 grain, and intravenous digitalization are advisable.

Postoperative care is primarily medical. If a cardiac pacemaker is available it should be in the patient's room, ready for use.

I would like to stress again that frequently there is no time to call for help in the performance of thoracotomy and massage and it should be done by the doctor nearest the patient. However, after cardiac massage has begun and the patient's lungs are well aerated there is usually time to call for other professional help for defibrillation and closing the chest wall if such assistance is needed. In fact, resuscitation has been successful in cases where defibrillators have been obtained from considerable distances after arrest has occurred and massage and aeration have begun.

Case History No. 1: V. W. was a 44-year-old cook with a long history of hypertension and peripheral vascular disease who developed in addition to congestive heart failure, gangrene of the left leg and the right foot with arterial and venous thrombosis and pulmonary emboli. In spite of extremely poor general condition, a femoral vein ligation and amputation was attempted to prevent further emboli from her gangrenous left leg. Cardiac arrest occurred during the femoral vein ligation while the patient was receiving nitrous oxide, oxygen and local infiltration anesthesia. The patient's heart was massaged within one minute from the time of arrest and within two minutes had resumed its normal forceful contractions. The amputation was then finished and the chest was closed. Although her cerebration was limited to response to painful stimuli, the patient's pulse, respiration and blood pressure remained quite stable until she expired four days later with hyperpyrexia. Cerebral damage was due to poor oxygenation prior to arrest since the heart was in standstill only one minute before massage.

Case History No. 2: L. H., a 47-year-old man who was to undergo surgery for resection of a gastric diverticulum, suffered cardiac arrest immediately after beginning of anesthesia and intubation. In two minutes the heart was massaged and after a prolonged period of massage and treatment resumed its normal action. One hour and forty-five minutes later, when the chest wall was almost closed, cardiac arrest again occurred and attempts to stop ventricular fibrillation were unsuccessful. Postmortem examination revealed a massive myocardial infarction.

Case History No. 3: E. W. During a right radical mastectomy the patient's blood pressure gradually became unobtainable; following which her peripheral pulses were not palpable. Pulsation of the axillary artery continued and when this stopped no heart beat could be heard. Immediate thoracotomy was done and cardiac massage begun. The heart was in standstill. After 2½ hours of massage and electrical defibrillation, heart rate and blood pressure returned to safe levels and the radical mastectomy was quickly completed. Apparent complete recovery without signs of cerebral damage has occurred.

In summary, cardiac arrest is a significant problem in Alaska as elsewhere. If aeration, thoracotomy and massage are prompt and well-planned, resuscitation may be expected in a high percentage of cases. Every physician should be prepared to treat this emergency. Certainly a very aggressive approach is indicated in this tragic complication since some excellent recoveries occur.

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CHICKENPOX PNEUMONIA IN A CHILD

*GLENN B. CRAWFORD, M.D.**

BETHEL

Primary varicella pneumonia can be a fatal manifestation of this usually benign childhood disease. With two exceptions, the fifty-one reported cases have been limited to adults and newborns. Of the two cases occurring in children, the first was a fatal case, unconfirmed by autopsy, in an eight-year-old girl with rheumatic heart disease, and the second was a girl of five years, reported in a roentgenological review of sixteen cases (5) (14). The over-all mortality rate is sixteen per cent (16).

The following case is that of a fifteen-month-old native female who developed fatal chickenpox pneumonia while hospitalized for enteritis. The fulminant character of the common childhood diseases in Alaska natives is frequently impressive. This characteristic, combined with the patient's debilitation from diarrhea, provides the setting for this third reported case of chickenpox pneumonia in the childhood age group.

CASE REPORT

S.J.K., a fifteen-month-old Eskimo female, was admitted to the Bethel Hospital July 16, 1957. The present illness began one day prior to admission when the father noted fussiness and anorexia associated with four, soft, foamy stools. Two watery stools were passed on the day of admission. At the age of three months she had been hospitalized for bronchopneumonia and ulcerative stomatitis.

On admission the rectal temperature was 100 degrees. The patient was very irritable and showed evidence of recent weight loss and lack of skin turgor. The posterior pharynx and tonsils were injected. The remainder of the examination was normal.

Initial hemoglobin determination was 10.3 grams. White cell count was 3,200: 25% neutrophils, 69% lymphocytes, and 6% monocytes. The spinal fluid and urinalysis were normal. Throat swab on smear showed monilia organisms and on culture grew E. coli. X-rays showed dilated, gas-filled small and large bowel. There was no evidence of pulmonary disease.

Shortly after admission, attempts to give fluids orally produced abdominal distention, and frequent watery stools. Treatment with parenteral fluids, antibiotics, and adsorbents produced gradual improvement. By the fourth hospital day, the temperature, which had been intermittently elevated to 100 degrees, remained normal and the patient began to tolerate a regular diet with only occasional abdominal distention.

A few erythematous vesicular lesions were noted on the abdomen July 27, and the patient was placed in chickenpox isolation. On July 31, the tem-

* *Present Address: Alaska Native Service Hospital, Anchorage.*

perature suddenly rose to 102 degrees associated with a profusion of hemorrhagic, vesicular-pustular skin lesions, periorbital edema, lethargy, and anorexia.

X-rays obtained August 1, again showed small and large bowel distention. The chest film revealed a coarse nodular infiltrate in the right hilar area. Antibiotics and parenteral fluids were reinstituted. On August 2, the oral mucosa was densely covered with vesicles, all oral medication and fluids were refused and respirations became shallow and rapid. No cough or rales were noted and the respiratory symptoms were felt to be related to the abdominal distention which had again become marked. The following day, eight days after the first chickenpox lesion had been noted, the patient became cyanotic, despite oxygen, and expired.

Autopsy Findings: Gross Examination:

The skin was covered with elliptical vesicular-pustular umbilicated lesions in all stages of development. Over the abdomen, groin, and buttocks these lesions were frankly hemorrhagic. Similar lesions were noted on the oral mucosa. There was no evidence of pleural or peritoneal lesions and no excess fluid was noted in the body cavities.

Multiple, two to three millimeter, dark red to almost black spots were noted on the surface and on cut sections of the lungs. There appeared to be normal aeration and crepitance. The trachea and bronchi were free of lesions and excess secretions. Grossly, the heart appeared normal.

Examination of the abdominal cavity showed the stomach and small bowel markedly distended with air. The mucosa appeared congested and in the large bowel there were multiple one to two millimeter ulcers with evidence of hemorrhage. The liver and spleen were slightly congested but otherwise appeared normal. There were many five to ten millimeter "rubbery" mesenteric lymph nodes most pronounced in the area of the proximal jejunum. No gross abnormalities were noted in the genito-urinary system.

Miscroscopic Examination:

The skin showed epidermolysis and vesicles with reticulated septa. Giant cells were noted and many cells showed pale, pink-staining, intranuclear inclusion bodies, characteristic of varicella. Colonies of staphylococcal-like organisms were noted with large numbers of neutrophils in the dermis and subcutaneous tissue. Areas of hemorrhage were evident.

Many microscopic, pale staining areas with loss of architecture were evident in the lung. Surrounding these areas, eosinophilic intranuclear inclusion bodies were noted in alveolar lining cells and endothelial cells. Some alveoli showed hemorrhage or congestion. In several areas, the alveoli were thickened and collapsed, while in others the septa were thinned and ruptured. Cellular elements were seen in the bronchi.

Eosinophilic intranuclear inclusion bodies were present in reticulo-endothelial cells and parenchymal cells surrounding areas of necrosis in the liver. Inclusion bodies were also noted in some of the bone marrow cells. Hemopoietic activity was generally diminished.

The remainder of the sections showed changes compatible with enteritis and congestion.

DISCUSSION

The clinical picture of varicella pneumonia can be summarized as follows. Symptoms of pulmonary involvement begin from three to seven days after the onset of the rash, and usually correlate with massive hemorrhagic progression of the cutaneous involvement and a second temperature elevation. The cough is most frequently dry and harsh and productive of small amounts of thick tenacious sputa (3). In about half of the cases hemoptysis is noted (11). Pleuritic pain is a frequent complaint. As the disease progresses, dyspnea and cyanosis become more and more severe. As is frequently the case in viral pneumonias, the clinical symptoms and x-ray findings may be pronounced without rales or rhonchi being heard on physical examination (17). The expiratory phase is usually prolonged. Shock and congestive heart failure have been reported as complications (9, 12).

Leukocytosis is rarely seen, and if present, particularly if associated with a secondary temperature elevation, may indicate bacterial rather than primary varicella pneumonia (1). Urinalysis is normal or may show small amounts of albumin. If hematuria and albuminuria are present, varicella nephritis should be suspected (8).

The x-ray findings are characteristic and consist of widespread nodular densities superimposed on markedly increased bronchovascular markings. The nodules are of various sizes and shapes and are seldom sharply delineated. They tend to be heaviest at the bases and hila, and may be confluent and transitory. As the rash subsides, the nodules usually disappear; however, some interstitial thickening may persist for several weeks (13). Slight pleural effusion is sometimes noted (10, 14, 15).

Pathological changes within the lung consist of multiple foci of necrosis and hemorrhage. There is associated swelling, proliferation, and desquama-

tion of alveolar cells, and infiltration of mononuclear cells. Type A eosinophilic intranuclear inclusion bodies are found in septal cells and macrophages. Involvment of bronchiolar epithelium and pleura may be noted (6). Similar patches of necrosis and hemorrhage with inclusion bodies have been reported in the spleen, liver, adrenal glands, kidneys, and paratracheal lymph nodes (4).

Treatment is supportive, with oxygen for cyanosis and dyspnea, and parenteral fluids as needed to maintain adequate hydration. Antibiotics may be used to prevent secondary bacterial infection. Aureomycin has been reported as beneficial, but it is debatable if there is any direct effect on the virus (2). Corticosteroids were used with rewarding results in at least two cases that appeared to be terminal (16).

Protection by isolation techniques and gamma globulin or convalescent serum is important in debilitated children and previously uninfected adults. With the exception of the neonatal group, no attempt should be made to protect healthy children from chickenpox since morbidity and mortality are increased in adults.

SUMMARY

Varicella pneumonia may be very fulminant and rapidly fatal. It occurs mostly in the neonatal and adult age groups. A fatal case in a fifteen-month-old child already debilitated by enteritis is presented. The clinical signs and symptoms and the laboratory, x-ray, and pathologic findings are summarized. Treatment is mainly supportive. The protection of already ill children from chickenpox by isolation and gamma globulin is stressed.

I am indebted to Dr. Clermont Powell and Dr. Michael Beirne for review of the microscopic material.

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OBSERVATIONS ON HYPNOSIS IN GENERAL PRACTICE

J. B. DEISHER, M.D.
SEWARD

The purpose of this article is to sketch some personal experiences with the use of hypnosis in general practice in a small community in Alaska. The population of the community is approximately 2100, and the racial background largely white immigrants from the other 48 states with a small admixture of Alaska natives and part-natives. The general education level of the populace is high school graduate. The economy is based upon longshoring and fishing activities.

The writer first became interested in the subject of hypnosis when he came upon a book entitled "Experimental Hypnosis," edited by Leslie M. LeCron (1). Subsequent to this he attended a concentrated three-day session of Seminars on Hypnosis at which a faculty of six members, including a psychiatrist, a gynecologist, a general practitioner, Mr. LeCron who is a clinical psychologist, and two dentists, explained and demonstrated some of the uses, techniques, and limitations of this little understood psychological phenomenon. This led directly into further reading (2, 3, 4, 5) and subscription to journals on hypnosis followed by attempts to utilize it in a general medical practice. The results have been disappointing in some cases, startling in other cases, and very helpful in perhaps the majority. The most important single fact learned at the Seminars was that the writer had been using hypnosis without knowing it prior to attending the course.

The use of hypnosis in medicine is as old as the art itself. Boiled down to its essentials, hypnosis is a state of rather intense concentration with a markedly introspective cast which leads to a condition of increased suggestibility wherein ideas presented from outside the organism seem to arise from within and govern the behavior of the subject. Hypnosis is based upon an intense interpersonal relationship involving imagination, interested expectation, and faith, and is thus more closely related to the emotions than to the intellect. From a psychiatric point of view the boundaries of the conscious ego become less distinct; there seems to be an increased porosity of the wall which separates the conscious from the unconscious. Certain it is that the nature of hypnosis is little understood (6, 7); however, its utilization for both good and evil has been grasped either scientifically or intuitively by many people throughout the ages of man.

In general practice the physician is under obligation to utilize whatever methods and materials may come to his attention for the alleviation of the distress of his patients, restricted only by the dictum of **primum non nocere.** The techniques grouped under the title of hypnosis are just one such set of tools, handy and readily available to anyone who will learn to recognize and use them. Actually the physician uses suggestion many times every day—and has it used on him probably an equal number of times. The laying on of hands, the complex physical examination, the laboratory with its mysteries, the formidable prescription (written in Latin and other cabalistic symbols), the physical therapeutic modalities—all of these carry in our tribe the same impressive magic which the frequently cartooned mask and rattle of the shaman carry in other tribes. It is impossible for the patient to avoid the suggestion that all this will surely make him well. The ever-present unrecognized factor of therapeutic suggestion necessitated the development of the double-blind experimental study without which the true importance of any new medication or surgical procedure is fair subject for debate. If, then, we recognize that we accidentally are using suggestion to the benefit and/or detriment of our patients daily, would it not be just a little more intelligent to use it consciously, knowingly, and with as great an effect as possible? The use of hypnosis permits us to do exactly this. But it is not a panacea.

Selection of Patients for Hypnosis: Not all patients are susceptible to deep hypnosis although it is maintained that 95% or more people are actually hypnotizable provided sufficient effort is directed to this end. Approximately 20% of the general population are good hypnotic subjects who go into a trance with very little effort and who go into a very deep trance quite quickly. It is with these people that it is easiest to work in this particular way. Another 50% or so are easily put into a light hypnotic state and the effect of suggestion even in this light trance state is much more notable than in the fully waking condition. Certainly **hypnotizability** is one important

criterion of selection. How can hynotizability be estimated? By attempts at waking suggestion or actual attempts at hypnotic induction. These are quite similar both in effect and basic procedure. It is interesting to note that among college students studied for hypnotizability this trait is most often found in intelligent extroverted well-adjusted men and women who are often leaders in their group (8, 9).

Hypnotic induction is **avoided in the psychotic and prepsychotic** if they are identifiable. If there is a danger in hypnosis, it lies in just such cases. The increased porosity mentioned above may permit repressed material from the unconscious to reach consciousness with the development of severe symptoms of a psychiatric nature. Should such a person be inadvertently hynotized and show signs of severe anxiety, however, the trance may be promptly terminated with the instructions that he will recall nothing and will be as sound in mind and body as he was on entering the room. In hypnosis as in any therapeutic effort the patient must be protected by his physician.

Cooperation on the part of the patient is necessary and for this reason the basic desires of the patient must be considered in selecting the subject for hypnosis. Cooperation may be enlisted or enhanced by removal of fears and misunderstandings concerning the hypnotic state and the utilizations thereof, and clarification of the patient-physician relationship. Rapport is the **sine qua non** of hypnosis.

Techniques of formal hypnotic induction are almost as numerous as the practitioners of the art and will not be dealt with in detail here. All of them embody the use of monotonous, more or less rhythmic stimulation combined with properly timed prediction of certain universal or inevitable neuro-physiologic events so that the subject becomes convinced that what the operator predicts will occur. Once such a prediction is established—could one call it faith? or rapport?—suggestibility is enhanced to the degree that as each suggestion is followed the process is intensified. It is my feeling that one should refer not to depth of trance but rather to intensity.

Present Series: Leaving theoretical considerations, let us turn to the results in two and one-half years of experience with hypnosis in a general practice. During this period the process has been consciously attempted in 70 patients. It was abandoned as ineffective in 8. It was offered to many others who refused it under the name of hypnosis. Its use probably has alienated a fairly large number who had superstitious fears and with whom little or no rapport had previously been developed.

As shown in the accompanying tables, of the 62, 36 were obstetrical patients. Hypnosis was utilized in 8 cases of acute injury. Thirty-one instances of use in psychosomatic problems are listed. The total is greater than 62 because hypnotic techniques were used for more than one purpose in some of the patients.

Explanation of the tables is in order. Patients are grouped by age and sex and the levels of hypnosis induced are designated as Relaxed (or Hypnoidal), Light, Medium, and Intense. The clinical results of hypnosis are classified as: Failure, Helpful, Successful, and Eminently Successful. The difference between

Table 1.—LEVEL OF HYPNOSIS IN 62 PATIENTS GROUPED ACCORDING TO AGE AND SEX.

Age Group Years	MALES—8				FEMALES—54				Total
	R	L	M	I*	R	L	M	I*	
0-5	0	0	1	0	3	0	1	0	5
5-10	1	1	1	0	0	0	0	0	3
10-15	0	0	0	0	0	0	0	0	0
15-20	0	0	0	0	0	2	4	3	9
20-30	0	1	0	0	2	8	7	7	25
30-40	0	1	1	0	3	2	7	3	17
40-50	0	0	0	0	1	0	0	0	1
50+	0	1	0	0	0	0	1	0	2

*R—Relaxed
L—Light
M—Medium
I—Intense

Table 2.—RESULTS OF HYPNOSIS.

Type of Patient	F	H	S	E S*	Total
Obstetric	9	18	9	0	36
Traumatic	0	2	3	3	8
Psychosomatic	5	14	8	4	31
Totals	14	34	20	7	75

*F—Failure
H—Helpful
S—Successful
E S—Eminently Successful

Table 3.—RESULTS OF HYPNOSIS IN PSYCHOSOMATIC AND RELATED DISORDERS

Type of Psychosomatic Disorder	F	H	S	E-S*	Total
Specific Fear	0	2	1	2	5
Acute Anxiety	0	2	4	0	6
Pain	3	1	2	0	6
Obesity	1	5	1	2	9
Asthma	0	1	0	0	1
Arthritis	0	1	0	0	1
Enuresis	0	1	0	0	1
Dermatitis	0	1	0	0	1
Ejac Precox	1	0	0	0	1

*F—Failure
H—Helpful
S—Successful
E S—Eminently Successful

the last two lies in the fact that occasionally medical aids were utilized with hypnotic training with excellent results which could not therefore be attributed entirely to the effects of hypnosis.

In no case was complete hypnoanesthesia obtained in a parturient, but, as found by Heron (10), duration of labor was decreased in general and the amount of chemical anesthesia required was reduced somewhat. The patients were in general more quiet and cooperative throughout their labors even when, as occasionally occurred, labor seemed severe and rather prolonged. Spectacular results were obtained in diminishing nausea and vomiting and in creating an aversion to salt in several. Caloric control was assisted. Lactation which was not suppressed by medical means in one woman who was unable to nurse her child was terminated abruptly by post-hypnotic suggestion.

The most impressive and completely unlooked-for results were in the personalities of the patients, commented upon by the patients themselves as well as their families. The changes noted may be described as increased stability and calmness (decreased irritability), increased confidence in managing themselves, their families, and their homes, and often a special affection for the baby resulting from the pregnancy during which training was given.

One patient with symptoms suggestive of hyperthyroidism during pregnancy (tremor, increased pulse, looseness of the bowels, and increased perspiration) was assisted in decreasing her general level of hyperactivity beyond the level of control given by propylthiouracil which was used with caution out of consideration for its effect on the fetus.

Two of the cases of trauma were in women who were delivered without previous hypnotic training. The patients were complaining of pain during attempts at episiotomy repair under local anesthesia. Simple fixation of the patients' attention on the ceiling light accompanied by suggestions of relaxation, drowsiness, and sleep with consequent anesthesia of the perineum allowed repair to proceed without further complaint verbal or non-verbal. The other 6 instances of trauma were in children under 10. One child had a fractured wrist and the result from hypnosis was classified as successful. The remainder were lacerations, 3 of which were on the face where there would have been either a need for general anesthesia or extreme difficulty without the immobility, decreased sensitivity and cooperation produced by hypnosis—a sort of vocal anesthesia. One case in particular stands out. This involved a jagged shale cut on the bridge of the nose in a 3-year-old girl who lay quiet as the area was infiltrated with Metycaine, debrided and sutured. On return visits for suture removal she followed the previously given post-hypnotic suggestion for rapid induction and lay quietly with her eyes half open as the sutures were removed. One week later she fell again striking her nose in the same way and the process was repeated in its entirety.

Analysis of even this small series of attempts to deal with psychologic processes reveals that with acute specific problems the results are simpler and easier to obtain. There was no case of specific fear or acute anxiety that was not helped. Pain when acute could be obtunded quite successfully. Problems of a chronic nature such as psychogenic tension headache of long standing, obesity of years duration, sexual problems and so on, are more difficult for one without full-scale psychiatric training, especially if one is perhaps over-cautious in venturing into what may well be water of excessive depth.

Comment: In classifying results the author has perhaps leaned over backward a little to keep from seeming over-enthusiastic about the benefits of this mysterious and (to many) somewhat frightening therapeutic aid. In addition to the uses classified in the tables, there have been many cases in which deeper insight into the functioning of subconscious tendencies provided by an understanding of the process of hypnosis has added greatly to the ability to be tactfully persuasive for the benefit of the patient. Chance induction of hypnosis and the recognition of this happy and facilitating accident has been an "open sesame" in a few cases.

Summary: An analysis of 62 cases from a small-town general practice in which formal hypnotic techniques were utilized is presented with comments. This small series indicates that hypnosis is therapeutically uesful in about 85% of cases properly selected and may be considered quite successful in over a third and extremely successful in one out of ten. Hypnosis is most effective in the acute case where a specific result is desired. In more chronic cases the therapeutic return on the time invested may be unsatisfactory to general practitioners who lack an avocational interest in the field.

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SALMONELLOSIS TRACED TO SEA GULLS IN KETCHIKAN AREA

A. N. WILSON, M.D. and MRS. ROBERT BAADE, Ketchikan

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For many years it has been a matter of observation that with the coming of the storms of early winter, the sea gulls have left the waterfront of Ketchikan and flown back two miles to Ketchikan Lake for shelter. We have frequently had epidemics of gastrointestinal disease, generally known as "stomach flu" which have occurred at the same time of year.

The source of one outbreak of gastrointestinal disturbance in November and December 1953, has been traced to sea gulls on Ketchikan Lake which is the main source of water supply for the town. There were literally thousands of gulls on the lake that winter and the water showed gross contamination that could not be explained by runoff from the watershed, or from any other source. Birds are known to be a common source of Salmonella infection. In addition to containing organisms harmful to man in their intestinal tracts, the gulls here have an additional chance to carry infection in their daily travel between the sewer outfalls at low tide and the untreated water of the lake.

For these reasons a permit was obtained by Department of Health personnel from the U. S. Fish and Wildlife service to collect sea gulls for study. Shooting was done by Fish and Wildlife personnel and 14 sea gulls were collected in the first group. In addition to various worm parasites, the Alaska Department of Health Laboratory found Salmonella (Paratyphoid) organisms in one of the gulls. In November and December there were human cases with symptoms of Salmonella (Paratyphoid) infection. These symptoms are vomiting, diarrhea, abdominal cramps and fever. There were varying degrees of severity from the mild to those who need hospitalization.

Stool specimens obtained from hospital cases during the above epidemic were found to contain Salmonella (Paratyphoid). Medical records indicate that there were at least one hundred cases with severe enough symptoms to consult a doctor. Nobody knows how many cases were self-treated. The organisms isolated from the sea gull and the hospital patients were sent to the U. S. Public Health Service in Atlanta, Georgia for typing. The cultures from the gull and from the patients were all identified as Salmonella manhattan (an organism of the Paratyhoid C group).

Here, then, we have an instance of sea gulls carrying infection to a water supply and thus to the people of a town. The Laboratory work in Ketchikan was done by Mrs. Robert Baade, bacteriologist with the Alaska Department of Health most of the time since our branch laboratory was started. I should like to take this opportunity to point out some of the difficulties encountered in doing this fine piece of investigation. The trail to the lake is hard to traverse in the winter. Shooting the sea gulls and bringing them back to the laboratory took time, after which they had to be opened and cultures obtained from the intestinal tracts. Mrs. Baade felt justifiably elated on getting positive cultures from one of these sea gulls.

The polution of reservoirs by gulls and other birds has been previously reported. Last summer I had a long talk with Mr. Clarence Sterling, Director, Division of Sanitary Engineering of the State of Massachusetts. Mr. Sterling was one of the members of the Parran team who were finishing their second survey. Mr. Sterling commented on pollution of water supplies in Massachusetts by sea gulls and sent me a

paper by G. C. Houser printed in the Journal of New England Water Works, March, 1931. In that year the Massachusetts State Legislature passed a law permitting the shooting of sea gulls around the water supply reservoirs in order to guard against this pollution.

Pollution of reservoirs has also been recorded at various other points in the United States, Canada, Great Britain, and Central American countries. On the Pacific coast of North America, Victoria B.C., San Francisco, and Los Angeles have had trouble of this sort. In San Francisco one of the reservoirs was covered in 1919 and since then the new ones have been covered.

A report from New York City published in the Journal of the American Water Works Association, December, 1925, stated that the sea gulls flocked to the Hillview reservoir in thousands between August and April and that during this time water was polluted as shown by the high colon bacillus count in comparison with the rest of the year when the sea gulls were absent. Similar reports came from Scotland in 1929 and from London in 1928. One of these papers, published in the Medical Officer, 1928 by B. A. Adams reported the isolation of typhoid bacillus from gull excreta collected in the vicinity of a town where typhoid epidemics had occurred.

While efficient chlorination will break the chain between the transfer of salmonella infections by sea gulls to people through the water supply, it is certainly not pleasant to think of sea gulls roosting on logs on a city's water supply during the winter months. I might say that photographs of the dam on Ketchikan Lake during the winter of 1953 showed hundreds of sea gulls on the dam and on logs. In the benefit of public health, it would be pertinent to ask the Legislature to pass a law legalizing the shooting of sea gulls around water reservoirs.

The Chemotherapy of Antibiotic-Resistant Staphylococcal Infections

RODMAN WILSON, M.D.
ANCHORAGE

As every reader of the Sunday Supplement knows, hospitals today are infested with antibiotic-resistant staphylococci—organisms which frequently cause serious disease among hospitalized individuals. The overgrowth of drug-resistant mutant strains of staphylococci in a patient treated with penicillin, streptomycin, or the tetracycline drugs and the spread of these microbes to hospital personnel and to other patients is a sequence painfully familiar to all physicians (1). The tools of prevention of a majority of these nosocomial infections are, however, at hand (2) in the tightening of surgical and nursing techniques, in the detection and control of carriers, and in the curtailment in the use of antibiotic agents where need is not present, particularly in so-called "prophylaxis of infection" in clean surgical cases, in uninfected unconscious patients, in uncomplicated measles, in tracheotomized individuals, and the like, wherein the use of antibiotic agents has been shown to be not a boon, but a menace (3). But penicillin continues to be so routinely prescribed that, analagous to the detergent Tide in the Ohio River, it is actually present in measurable amounts in the floor dust of hospitals (4). Fortunately, penicillin dust is not everywhere. Once a patient leaves the hospital, the resistant strains of staphylococci are gradually submerged in the sea of sensitive organisms in the community, and a normal flora returns to his skin and nasopharynx (5).

But, despite the recent development of several new antimicrobial agents, the treatment of drug-resistant staphylococcal disease, whether it be wound infection, cellulitis, pneumonia, enterocolitis, septicemia, or bacterial endocarditis, remains difficult. No thoroughly satisfactory drug agent exists for the cure of these troublesome and often deadly infections. Great reliance must be placed, therefore, upon in vitro antibiotic sensitivity studies as a guide to therapy, despite the shortcomings of such tests as performed with discs in a "routine" laboratory (6). The following principles can, in any event, guide therapy:

1) **Use antibiotic agents one at a time:** With a greater variety of chemically dissimilar agents now available one can to good advantage use drugs sequentially rather than additively. Combinations of agents have, by and large, been disappointing in the management of staphylococcal disease. With the exception of a very few instances of proved synergism

Antibiotic Agents of Use in the Treatment of Drug-Resistant Systemic Staphylococcal Infections

DRUG	ACTION	ROUTE	DAILY DOSAGE Adult gm.	DAILY DOSAGE Child mg./kg.	TOXIC REACTIONS
Erythromycin					
Ilotycin (Lilly)		Oral	2-4	40-60	Gastrointestinal irritation
Ilosone (Lilly)	Bacteriostatic	I.M.	1-2	15-30	Pain on injection
Erythrocin (Abbott)		I.V.	1-2	15-30	
Erythromycin (Upjohn)					
Novobiocin					
Albamycin (Upjohn)		Oral	1-2	15-30	Skin eruptions
Cathomycin (Merck	Bacteriostatic	I.M.	1-2	15-30	Neutropenia, eosinophilia
Sharp & Dohme)		I.V.	1-2	15-30	Yellow pigment in serum
					Incompatibility with glucose
Ristocetin					Skin eruptions
Spontin (Abbott)	Bacteriostatic	I.V.	2-8	50-200	Neutropenia
					Chemical phlebitis
Bacitracin					
Bacitracin (Pfizer, Upjohn)	Bactericidal	I.M.	100,000 units	1200 units	Nephropathy Pain on injection
Kanamycin					
Kantrex (Bristol)	Bactericidal	I.M.	1-3	15-45	Skin eruptions Nephropathy Eighth nerve damage
Vancomycin					
Vancocin (Lilly)	Bactericidal	I.V.	2-4	50-100	Skin eruptions Chemical phlebitis Rare eighth nerve damage

between drug agents, the effect of a combination usually can be equalled or surpassed by giving a larger amount of the more potent drug of the pair (7). Furthermore, evidence that the development of the resistance to either agent of a pair is delayed in vivo by use of drugs in combination is meager (7). The simultaneous administration in full dosage of two or more agents of demonstrated in vitro efficacy cannot, however, be condemned. Indeed, this is probably to be preferred when managing staphylococcal endocarditis or other deep-seated chronic or subacute staphylococcal disorders. It is likely, however, that the future of chemotherapy in this field will see greater emphasis upon the use of agents singly rather than in combination.

2) **Use large dosage of drug:** Unless toxic side effects are a major danger, doses of drug agents employed in the treatment of staphylococcal disease should be well above those customarily recommended for other infections. For example, a daily dose of 1 to 2 grams of erythromycin is usually advised for the treatment of coccal infections. For staphylococcal disease a daily dose of 2 to 4 grams is much preferred.

3) **Continue treatment for a long time:** Gonorrhea can usually be cured with a single injection of procaine penicillin, while pneumococcal pneumonia ordinarily requires but 3 to 4 days of penicillin. The eradication of staphylococcal septicemia or endocarditis on the other hand may require weeks or even months of treatment. Seven days should be the absolute minimum duration of treatment for any major staphylococcal infection.

4) **Do not abandon the use of a drug too quickly:** The management of systemic drug-resistant staphylococcal disease calls simultaneously for boldness and restraint in the employment of drug agents. Unless a patient is deteriorating rapidly or unless laboratory studies demonstrate that a drug in use cannot be expected to help, any agent should be given 48 to 72 hours to prove itself. In septicemia failure of the blood to be sterilized immediately by an antibiotic agent does not necessarily spell defeat for a given regimen (8).

5) **Do not trust bacteriostatic drugs in the treatment of staphylococcal endocarditis:** Any patient with a heart murmur and a blood culture positive for Staphylococcus aureus should be considered to have bacterial endocarditis, although endocarditis may be present without murmur (8). Staphylococcal endocarditis may be a fulminating disorder terminating violently within 3 days of onset or it may mimic exactly Streptococcus viridans subacute bacterial en-

docarditis. In either situation bacteriostatic agents such as chloramphenicol, erythromycin, novobiocin, or ristocetin cannot be relied upon to work a cure.

6) **Drain accessible pus:** Neglect of this ancient principle may spell defeat for an otherwise effective therapeutic program.

Six antimicrobial agents (table) are of particular value in managing drug-resistant staphylococcal disease:

Erythromycin: This drug is effective in many staphylococcal infections in doses of 2 to 4 grams daily as it is highly bacteriostatic to many strains of penicillin or tetracycline-resistant staphylococci. It is of little use in the management of bacterial endocarditis, however, because resistance to it rapidly develops as a rule. Chloramphenicol (Chloromycetin) has been widely advocated as an agent to be used with erythromycin, but, as suggested above, the effect is less than additive as a rule (7) and evidence that it prevents in vivo the development of resistance to erythromycin has not been adduced (9). Sad to say, the effectiveness of erythromycin has been greatly vitiated in many communities by capitulation of physicians to the exhortations of producers to use erythromycin in all gram-positive coccal infections. Erythromycin is an excellent drug, but it belongs on the shelf for use in proved or strongly suspected staphylococcal disease. Advertising claims to the contrary, erythromycin is not the drug of first choice in any gram-positive infection (except possibly diphtheria). Penicillin, a bactericidal agent, is much to be preferred in non-allergic patients with pneumococcal and (Group A) beta hemolytic streptococcal infections and, of course, in staphylococcal disease when the organism is sensitive.

Novobiocin (Albamycin, Cathomycin) is another bacteriostatic agent of value in managing staphylococcal disease. As with erythromycin, novobiocin does not often, if ever, cure endocarditis and often fails in other deep-seated staphylococcal disease. Furthermore, its use is attended by so many unpleasant, though usually not serious, side effects—skin eruptions, neutropenia, discoloration of the plasma which interferes with determination of bilirubin, and incompatibility with glucose solutions, that novobiocin can rarely be used with ease of mind on the part of the physician. It has no place in indiscriminate use in infections of dubious bacterial identity and no place in fixed combination with other drug agents (Panalba, Alba-Penicillin, Cathocillin). The use of novobiocin will undoubtedly decrease as better agents are produced, for it is an imperfect drug with annoying side reactions.

Ristocetin (Spontin) is an agent recently developed for the treatment of staphylococcal and enterococcal disease. It is a bacteriostatic drug without major toxic disadvantages. It can be used only intravenously, making prolonged administration a chore as well as painful to the patient at times because of the tendency for chemical phlebitis to occur. Neutropenia has developed from its use, but irreversible bone marrow damage has not been recorded. Ristocetin has been disappointing in the management of staphylococcal septicemia and endocarditis, and its activity in vitro and in vivo has been difficult to correlate (10).

Bacitracin: This agent is bactericidal and finds limited effective use in staphylococcal septicemia and endocarditis, usually in combination with other drugs. Nephrotoxicity limits dosage to 100,000 units daily in the adult. The appearance of protein and formed elements in the urine are to be expected when bacitracin is used, but unless the blood urea nitrogen rises, the drug need not be discontinued as a rule. Bacitracin finds further good use as a topical agent or for instillation into infected cavities.

Kanamycin (Kantrex) is an antimicrobial agent recently marketed which may prove to have a solid place in the treatment of staphylococcal disorders. It is bactericidal in clinically obtainable serum concentrations following intramuscular injection. Resistance to it is slow to develop. Skin eruptions, nephropathy, and eighth cranial nerve damage have followed its use. The ultimate place of kanamycin in the therapeutic arsenal for combating staphylococcal disease is yet to be precisely defined. Until such time it may be used with caution.

Vancomycin (Vancocin) is a potent bactericidal agent which has recently been released by the Eli Lilly Company after several years of development. It has not yet been observed to promote significant resistance in clinical use. It has cured endocarditis. Like ristocetin, vancomycin can be employed only intravenously and often causes thrombophlebitis. Otherwise, its toxicity is minor except for the rare development of eighth cranial nerve damage in patients in whom renal disease has produced unusually high blood levels. Vancomycin probably will prove to be the best of the agents herein described for the management of serious staphylococcal disease. It has won the praise of virtually all authorities in the field.

Many other drug agents have been advanced as of value in the therapy of staphylococcal disorders. but most are merely weak cousins of erythromycin. These inbred relatives include, in order of decreasing strength (7), triacetyloleandomycin (Cyclamycin, Tao), oleandomycin (Oleandomycin, Matromycin, Romacil),

carbomycin (Magnamycin), and spiramycin (Rovamycin). These agents have little or nothing to offer in treatment of staphylococcal disease, or in any other infection for that matter, either singly or in fixed combination with tetracycline (Signemycin), for better agents are readily available. Neomycin is too toxic to use parenterally, except under the most desperate circumstances. Leucomycin, furmethonol, and other agents now under investigation show promise and may tomorrow be the drugs of choice.

Finally, a rather simple suggestion to reduce the magnitude of the problem of the treatment of drug-resistant staphylococcal disease in Alaska; if all physicians were to refrain from using erythromycin (and weak cousins), novobiocin, ristocetin, bacitracin, kanamycin, and vancomycin except when antibiotic-resistant staphylococcal disease is proved or strongly suspected (or in the occasional instance when one of these agents proves after testing to be the drug of choice in, say, a proteus or enterococcal infection), then Alaskan physicians would have at least 6 agents to which they could confidently turn when a penicillin, tetracycline, or chloramphenicol-resistant staphylococcal infection presented itself. It may be a blessing that one of the best agents now available (vancomycin) can only be used intravenously, for use of this drug will not spread beyond the hospital and administration within the hospital will undoubtedly be limited. For this reason it will probably remain an effective agent. The difficulty comes in restraining the non-specific use of erythromycin, novobiocin, and kanamycin, besieged and importuned as we are to their use "in all coccal infections". If restraint were exercised, our therapeutic problem in Alaska need never assume alarming proportions.

In ages past people have feared from time to time that hoards of onrushing rats would one day drive them from their refuse-laden cities. Latter-day pessimists have half-seriously suggested that the staphylococcus would one day inherit the earth. The enemy is extraordinarily stubborn and exceedingly adaptable, but, all things considered, not nearly so clever that it can permanently outwit the soil bacteriologist and the pharmaceutical-house chemist. There will always be a Pied Piper of Pfizer or Lederle or Lilly with a new chemotherapeutic pipe to lure the pestilential bacterium to its destruction—at least temporarily.

SUMMARY

Several potent drugs are now available for use in antibiotic-resistant systemic staphylococcal infections. Among them are erythromycin, novobiocin, ristocetin, bacitracin, kanamycin and vancomycin. These agents should, by and large, be reserved for use only in proved or strongly suspected staphylococcal disease.

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Julius Lempert's Contribution To Alaskan Ophthalmology

MILO H. FRITZ, M.D.
ANCHORAGE

From 1936 through 1940 I went through the residency in ophthalmology and otolaryngology at Duke University. We removed tonsils and adenoids under light general anaesthesia. We did submucous resections of the nasal septum. We performed many simple mastoidectomies for acute mastoiditis. We intubated or tracheotomized infants with diphtheria, often at the last moment. Some of the men, in their last year, did modified radical mastoidectomies but a complete exenteration of the mastoid labyrinth was never, during the years I was there, accomplished. We occasionally essayed journeys into the tricky field of rhinoplasty and rarely removed a thyroglossal duct cyst if we could beat the house officers of the general surgical service to the punch and get the patient admitted to our service before he was admitted to theirs.

Mastoidectomies in those dim and distant days were done with a set of instruments more calculated to bring joy to the heart of one trying to lead joints between sections of cast iron pipe than to a doctor who was working in one of the anatomically most treacherous areas in the human body, surrounded as it is with such vital structures as the dura of the middle and posterior fossae, the labyrinth, the carotid artery, the jugular bulb and, above all, the facial nerve.

The young man who followed me in the hierarchy in the combined residency of ophthalmology and otolaryngology as it existed at Duke University Hospital at that time was Doctor Ralph Arnold, now on the teaching staff of that wonderful institution. In 1938 we both, within an hour, read Julius Lempert's monumental contribution entitled "Improvement of Hearing in Cases of Otosclerosis" as it appeared in the Archives of Otolaryngology for July 1938, Volume 28, pages 42-97. I recall how tremendously excited we were about it and how we hastened to the senior members of the staff saying that in our opinion it was very worthwhile for someone on the house staff to observe this new surgery with the idea, perhaps, of introducing it to the ENT Department of our University. This idea was not received with enthusiasm.

Neither Ralph Arnold nor I were receiving any stipend for our services and one unkind house officer on the pediatric staff said that I was worth every cent of it! Yet the idea that Arnold and I cherished was to go and watch Julius Lempert do this operation whether it could be introduced at Duke University or not.

Time went on and then, entirely unknown to us, a lawsuit was instituted in New York City in which the findings of an intern during a physical examination became a crucial point. The patient's name is forgotten. I was the intern and the events which were to be brought forth at the trial occurred at the Brooklyn Hospital where I had interned two years before going to Duke University. The insurance company wrote to me and asked if, in return for free passage to and from New York City and fifty dollars, would I be willing to testify at the trial. That was like asking a starving man whether he would like to have a turkey dinner with all the fixings. I remember rushing over to Ralph Arnold's room waving the letter and telling him that here we had a chance to learn something about this Julius Lempert and his new technique for the improvement of hearing in otosclerosis.

With eager hand I inscribed a letter to the insurance company and told them I would be more than happy to come on the terms stipulated and received permission from my superior in the department of otolaryngology to make the trip.

Accordingly, I appeared at the trial, made the appropriate comments when asked by the lawyers of the opposing sides, was discharged, paid off and had two whole days to myself before it became necessary to return to my duties as assistant resident in ophthalmology and otolaryngology at Duke University.

Meanwhile, clearly outlining that I was, of course, a very low member on the totem pole at a very high class university, I had written to Doctor Lempert and asked if it would not be possible for me to call upon him while engaged in New York un-

der the circumstances just mentioned. With graciousness that could hardly have been exceeded had I been the Professor of Otolaryngology himself instead of the merest neophyte, Doctor Lempert replied in a letter which I still possess that he would be very happy to have me come to his hospital and watch him do one of these operations.

Accordingly, I arrived on Doctor Lempert's doorstep, was accorded every courtesy and consideration and was given a loupe and light combination with which to peer over his shoulder as he methodically and deftly went through his monumental operation that has been so influential, both directly and by the kind of work it subsequently stimulated, in the restoration of hearing to thousands of individuals throughout the world.

In due course my residency came to an end, and I moved to Southeastern Alaska to practice for the rest of my life only to have said life interrupted by a call to arms, which lasted over five years before I was eventually mustered out. I spent a brief but happy time as a Staff Member of the Eye Institute of Dartmouth in Hanover, New Hampshire and two years as a Research Fellow and part-time practitioner of ophthalmology alone in New York under the benign and invaluable influence of Doctor R. Townley Paton before eventually returning to my first and only love, Alaska.

A beneficent government made it possible for any honorably discharged soldier to invoke a generous provision for his further education known familiarly as the GI Bill of Rights. Having been appalled at the prevalence and incidence of mastoiditis in Alaska, I had found, as soon as I had returned to Alaska for what proved to be last time in 1948, that the classical attack on the problem of mastoiditis was hopeless and therefore I invoked my GI Bill, requesting that I be given permission to take a course in fenestration surgery for the improvement of hearing in cases of otosclerosis at the Lempert Institute of Otology in New York City. This was in 1950 and in due course the Veterans Administration granted permission and eventually footed all the bills connected with it.

In that memorable May and June of 1950, with six or seven other doctors from various parts of the United States, I attempted to attain mastery over the temporal bone with the idea of becoming familiar enough with it so that I could, with greater ease, facility, safety and for the benefit of my patients, do radical mastoidectomies of which there were thousands to be done.

I still remember sitting down at the first cadaver head upon which I was to do my first operation. I had purchased a light and loupe and after making the initial gross maneuvers to uncover the mastoid labyrinth I put on my light and loupe and there before me, through the endaural approach, lay the mysteries and tortuous anatomy of the temporal bone, clearly delineated and easy to see. Quite aside from an advance in surgical technique, Doctor Lempert had brought to the sub-specialty of otology the twin blessings of illumination and magnification.

As all things must, whether good or bad, my final cadaver head operation for fenestration was completed at last to the apparent satisfaction of the most exacting medical mentors for whom I had ever tried to ro something praiseworthy . . . Julius Lempert and his brilliant young associate J. H. Thomas Rambo.

The gut-busting Thursday night suppers that Doctor Lempert stood us all to and the challenging lectures and demonstrations given by consulting members of the Institute were drawing to a close and soon it became necessary to bring my new knowledge to Alaska for the use of my fellow citizens.

The struggles with mastoiditis in Alaska have been described elsewhere and the training of the personnel and the acquisition of instruments for carrying out what I have learned were eventually safely undertaken and, as I had continuously done since returning to Alaska in 1948, I resumed an active practice in surgical and medical ophthalmology as well as otolaryngology.

Then one day, and please believe me that I was well under the presbyopic age at the time, while struggling with an iridencleisis for the relief of glaucoma, it suddenly came to me that it was not reasonable for me continuously to find fault with the direction in which the light rays from the operating room light were falling on the field nor was it reasonable of me to complain to myself or anyone that I could not clearly see that portion of the anterior chamber in which I was most interested. And at one such moment the very obvious and brilliant idea entered my brain, why not use the Lempert light and loupe in the performance of ophthalmological surgery? After all, I thought, if one can do better temporal bone surgery by virtue of better light and magnification would not the same thing hold true with the human eye?

Accordingly, I tried this revolutionary idea on a couple of cases involving surgery on the ocular muscles and was immediately rewarded with the unbelievable satisfaction of having the light always fall exactly where I was looking. Also, the details of ocular anatomy became much more easily seen and handled. The only difficulty was that a suture end would sometimes get out of the field of vision and occasionally I would bump a knuckle of my glove against the contaminated head-light and would have to change them. But it was not many days before these little accidents seldom occurred and as soon

as I had begun the practice of having my own surgical nurse helping me in these efforts I had no further difficulty. As a matter of fact, my operating time and the wear on the nervous system of not only myself but those young women who have so faithfully helped me throughout the years with this type of work became less and less.

Eventually the day came when I tried this technique on a cataract operation. I remember with what gratification I was able to place my sutures exactly halfway through the cornea and halfway through the sclera rather than perforating into the anterior chamber. I remember how I enjoyed the precision of taking hold of the iris at its periphery just exactly where I wished to, dialyzing it and then pulling the dialyzed portion into the wound to make a small peripheral iridectomy. I recall how I was able to see the zonule like a thin piece of plastic extending from the region behind the iris root out to the equator of the lens. Discission became an exact cutting of membrane across tension lines instead of a blind stab in the shadow of one's head or hand. I recall how, with exactness, I was able to gently dissect the zonule away from its attachment to the lens and thus begin the chain of events that would allow, in almost every case, the lens-in-capsule to be removed triumphantly from the anterior chamber without dragging out iris, vitreous or any other structures to which it might have been attached because I could not see it as I now could with the brilliant illumination and magnification supplied by the Lempert loupe and light.

The name of Julius Lempert is known to almost every physician, and certainly every otologist, throughout the world today. It is also known to every Eskimo or other Alaska native upon whom I have done temporal bone surgery for the suppurative diseases of that structure because I have made it a point to tell these people, as they have come and gone in hundreds since 1950, of the great city doctor who taught me how to do this surgery that has often resulted in the restoration of a child's life or the rehabilitation of an individual whose foul aural discharge made him a pariah among his peers, especially if living in a small, crowded cabin.

It is difficult for any surgeon to assess his skill. It is more difficult for him to assess his improvement because, as time goes on, most of us improve in our technique owing to practice, the improvement of instruments and the development of ancillary medications and techniques that improve performance. But even without the necessary laboratory controls it is my firm belief that I have been able to serve my Alaskan patients better and more efficiently since invoking Lempert's great contribution to ophthalmology . . . Light and Magnification . . . where both are needed!

STATE COURTS AS THEY AFFECT PHYSICIANS IN ALASKA

JOHN C. HUGHES, LL.B.
ANCHORAGE

The advent of Statehood in Alaska raises many interesting problems for coffee time discussion. With all of the speculation now being posed as to what to do next, the practicing physician might well ask the question: "What effect, if any, will Statehood in Alaska have upon my practice?" This question at the present moment may be a little bit premature but it is certainly the hope of all practicing lawyers that the advent of Statehood will bring with it more Court facilities to more readily dispose of the backlog of cases including unlitigated personal injury cases and it is in this field that the practicing physician may very well feel the impact of increased activity and more frequent trips to the Court room in the years to come. It is the writer's present thinking that the momentum of trial will not greatly increase for at least one year but in any event the tempo of trial work should increase commencing six to eight months from the activation of the State Superior Courts.

The writer has been asked to suggest to Alaska physicians the problems, if any, that may present themselves for solution in respect to the association

between doctors and lawyers in the discharge of the State Court backlog. Will there be any change? The answer to this question must, we think, be in the affirmative.

It should be noted, however, that with the use of some discretion on the part of the two interrelated professions involved, the transitional period and future cooperation between the Lawyers and Doctors

should be painless. As a practicing Lawyer I have for the past years, had many occasions requiring the appearance of a Doctor in the Alaska District Courts for the giving of impartial medical testimony. I can honestly state that never have my requirements for medical testimony in litigation presented a great problem. I have frequently heard expressed a latent regret on the part of a busy physician to appear in Court. I have even on occasion heard of litigants changing from one Doctor to another for the reason that their initial family physician had a known reluctance or a declared policy against appearing in Court. Litigants have an inherent right to their day in Court and they are entitled to the impartial testimony of a medical witness such as only their physician can give. What then is the problem?

The problem is many fold; the physician is a busy man; the day and often the night is too short to tend to his many professional duties; Court appearances often cut into or threaten long projected operative procedure; poorly scheduled Court appearances leave the physician twiddling his thumbs in the Court corridors, with a subpoena in his hip pocket, while the patients wait in his office; cross examination in Court, on problems of medicine without previous warning, often either pit one Doctor against another or have the appearance of an attempt to ridicule the Doctor who comes to help in the search for the truth; the lawyers are frequently uninformed or heedless of the proposition that the Doctors too have a problem in arranging tightly scheduled use of operating rooms that cannot be changed upon short notice and are seriously disturbed if not entirely lost in the event that the physician fails to avail himself of the operating facility at the time scheduled, which time may conflict with a Court appearance. These and many more constitute the problems facing the physician and in a large measure the problems stem from a lack of understanding between the Doctor and Lawyer. If in fact, as we suspect, there is to be an increased tempo of Court appearances, a problem is apt to become more pronounced under Statehood unless the interrelated professions meet head-on their problem and resolve their differences through courteous cooperation and understanding.

We have heretofore indicated that the increased tempo of litigation will increase the occasions of Court appearances for the practicing physician. The backlog of personal injury cases cannot be disposed of without the testimony of the medical practitioner who must supply the necessary ingredient of impartial medical testimony. Time will not permit a full coverage of all of the problems for it is the intent of this paper to raise the question and to alert those members of the interrelated professions who are interested in a timely solution.

It is only reasonable to believe that with more Courts available that the Court appearances of the Doctors, particularly in the Fairbanks and Anchorage areas, where the backlog of litigation is more pronounced, will be the points of first impact. Heretofore a great amount of the District of Alaska Court time has been spent in the trial of criminal matters. With a reasonable speculation that there will be from six to seven Superior Courts supplementing if not replacing the now existent four District Courts, the impact of medical appearances in Court procedures may very well be pronounced.

It would be well for both the Doctors and the Lawyers of the new State of Alaska to study the text of the "National Inter-Professional Code for Physicians and Attorneys" (See pages 27 and 28). This code was prepared by the American Medical Association and the American Bar Association liaison committee and adopted in June and August of 1958 respectively by the national associations involved. The code, as of this writing, has not appeared in print in the American Bar Association Journal. However, the writer has secured from the chairman of the American Bar Association committee, Frank C. Haymond of Charleston, West Virginia, a copy of the code which appears in its entirety at the end of this article.

All too frequently a practicing physician who appears in Court either enters the Court room or comes away from the Court room with the feeling that he has met an adversary in the person of a cross examiner in a Court proceeding. If the Doctor leaves the Court with the impression that he has been on the receiving end of the Court room conflict, he may very well have the impression that if he never goes back to Court again it will be soon enough.

In truth and in fact the province of the Doctor in a Court is to give impartial medical testimony. It is not the province of the Doctor to determine what the money damages of the patient are but merely to display to the Court in clear and concise language the facts of injury and treatment together with the fair opinion as to present or future disability if, as and when those questions are put to him appropriately by counsel involved in the litigation. This may and frequently does require that the Doctor explain the litigant's condition both professional and lay language.

It would probably stand the Doctor in good stead if he were to take the attitude that he was swinging the axe for neither side and that he, in giving his testimony, is hueing the line. If a Doctor assumes the attitude that because he is called by one of the parties, he must shade his testimony to meet the requirements of that person, he not only detracts from

his own testimony but builds for his profession a liability that may well have far reaching effects. While it may be true that a lawyer can argue either side of a particular case with equal versatility, that position, if it is true, probably should be left to the lawyers involved so far as the Doctors are concerned.

It is not intended in this brief statement to lodge an indictment against the Doctors, for indeed the writer's experience with the medical profession insofar as it applies to Court room work has been good and has been generally carried out in an atmosphere of pleasant cooperation.

We well realize that some lawyers may take the attitude that cooperation with the medical profession is unnecessary inasmuch as a lawyer can arm himself with a subpoena and accordingly direct and compel by Court order if necessary, the appearance of a busy physician at any time such an appearance is required. While there are items mentioned herein on which the writer feels the Doctors should inform themselves, nonetheless it certainly is a two-way street, in which the lawyers can likewise inform themselves as to their duty in regard to this interrelated professional problem. I hold no brief for the proposition that the problem here presented is solely for the remedial attention of the Doctor.

If we can but generate a spirit of cooperation between the two professions it would be hoped that we can minimize, if not entirely eliminate, the use of a subpoena so far as the obtaining of medical testimony is concerned. All too frequently the lawyer calling the medical witness fails to previously alert the Doctor in advance of trial; fails to discuss with the Doctor the field of testimony which is intended to be covered at the time of the Court proceeding and in general expects the busy practitioner to be a walking book of knowledge in respect of all matters of medical testimony, some of which the practitioner may not have reviewed or even seriously considered since medical college days.

It is the sincere hope of the writer that the local inter-professional groups will study the National Inter-Professional Code for Physicians and Attorneys and will take timely steps toward the end that a workable arrangement can be established in each community.

Medical testimony, reports and general information can and should be obtained without inconvenience to either profession and without the use of the subpoena. All Doctors should be informed that under the Federal Rules of Civil Procedure or their counterparts, which govern the mechanics of gathering and perpetuating testimony, in most modern Courts, there are no secrets. To a large extent the shroud of privilege between Doctor and patient-litigant has been swept aside. The information will be obtained and accordingly it serves both professions well to accomplish the recordation of fact without friction between the groups.

The old saw "a stitch in time" can be applied with meaning to the situation here discussed. The needle and the thread must first be brought together; otherwise there will not be accomplished the first stitch.

NATIONAL INTER-PROFESSIONAL CODE FOR PHYSICIANS AND ATTORNEYS

PREAMBLE

The provisions of this Code are intended as guides for physicians and attorneys in their interrelated practice in the areas covered by its provisions. They are not laws, but suggested rules of conduct for members of the two professions, subject to the principles of medical and legal ethics and the rules of law prescribed for their individual conduct.

This code constitutes the recognition that, with the growing interrelationship of medicine and law, it is inevitable that physicians and attorneys will be drawn into steadily increasing association. It will serve its purpose if it promotes the public welfare, improves the practical working relationships of the two professions, and facilitates the administration of justice.

MEDICAL REPORTS

The physicians upon proper authorization should promptly furnish the attorney with a complete medical report and should realize that delays in providing medical information may prejudice the opportunity of the patient either to settle his claim or suit, delay the trial of a case, or cause additional expense or the loss of important testimony.

The attorney should give the physician reasonable notice of the need for a report and clearly specify the medical information which he seeks.

CONFERENCES

It is the duty of each profession to present fairly and adequately the medical information involved in legal controversies. To that end the practice of discussion in advance of the trial between the physician and the attorney is encouraged and recommended. Such discussion should be had in all instances unless it is mutually agreed that it is unnecessary.

Conferences should be held at a time and place mutually convenient to the parties. The attorney and the physician should fully disclose and discuss the medical information involved in the controversy.

SUBPOENA FOR MEDICAL WITNESS

Because of conditions in a particular case or jurisdiction or because of the necessity for protecting himself or his client, the attorney is sometimes required to subpoena the physician as a witness. Although the physician should not take offense at being subpoenaed the attorney should not cause the subpoena to be issued without prior notification to the physician. The duty of the physician is the same as that of any other person to respond to judicial process.

ARRANGEMENTS FOR COURT APPEARANCES

While it is recognized that the conduct of the business of the courts cannot depend upon the convenience of litigants, lawyers or witnesses, arrangements can and should be made for the attendance of the physician as a witness which take into consideration the professional demands upon his time. Such arrangements contemplate reasonable notice to the physician of the intention to call him as a witness and to advise him by telephone, after the trial has commenced, of the approximate time of his required attendance. The attorney should make every effort to conserve the time of the physician.

PHYSICIAN CALLED AS WITNESS

The attorney and the physician should treat one another with dignity and respect in the court room. The physician should testify solely as to the medical facts in the case and should frankly state his medical opinion. He should never be an advocate and should realize that his testimony is intended to enlighten rather than to impress or prejudice the court or the jury.

It is improper for the attorney to abuse a medical witness or to seek to influence his medical opinion. Established rules of evidence afford ample opportunity to test the qualifications, competence and credibility of a medical witness; and it is always improper and unnecessary for the attorney to embarrass or harass the physician.

FEES FOR SERVICES OF PHYSICIAN RELATIVE TO LITIGATION

The physician is entitled to reasonable compensation for time spent in conferences, preparation of medical reports, and for court or other appearances. These are proper and necessary items of expense in litigation involving medical questions. The amount of the physician's fee should never be contingent upon the outcome of the case or the amount of damages awarded.

PAYMENT OF MEDICAL FEES

The attorney should do everything possible to assure payment for services rendered by the physician for himself or his client. When the physician has not been fully paid the attorney should request permission of the patient to pay the physician from any recovery which the attorney may receive in behalf of the patient.

IMPLEMENTATION OF THIS CODE AT STATE AND LOCAL LEVELS

In the event similar action has not already been taken this Code should, in the public interest, be appropriately implemented at state and local levels for the purpose of improving the interprofessional relationship between the legal and medical professions.

CONSIDERATION AND DISPOSITION OF COMPLAINTS

The public airing of any complaint or criticism by a member of one profession against the other profession or any of its members is to be deplored. Such complaints or criticism, including complaints of the violation of the principles of this Code, should be referred by the complaining doctor or lawyer through his own association to the appropriate association of the other profession, and all such complaints or criticism should be promptly and adequately processed by the association receiving them.

History of The Orthopedic Program For The State of Alaska

PHILIP H. MOORE, M.D., F.A.C.S.
SITKA

This presentation is not intended to be the usual one. I am not presenting statistics but will try to give you an informal history of the development of the orthopedic program and describe our attempts to solve some of our problems. This paper will be of interest to you because Alaska is one of the areas where pioneer medicine is gradually being replaced by organized programs and modern medicine. Every physician in Alaska is a participant.

The credit for the idea for an organized orthopedic program in Alaska should properly go to C. Earl Albrecht, M.D., who until 1956 was the Commissioner of Health. Credit should also be given to Mrs. Margot Hoppin of Anchorage, Alaska, formerly the President of the Alaska Crippled Children Association. Both Dr. Albrecht and Mrs. Hoppin were aware of the need in Alaska. A preliminary survey was done in the summer of 1946. The need of help for the natives and whites unable to bear the financial burden of surgery and hospitalization was established.

Prior to 1947 small numbers of children were sent to the States of Washington and Oregon for care. Dr. John LeCocq and his associates were largely responsible for the excellent care they received. Follow-up care was very difficult and many had recurrent deformities because of this.

In the winter of 1946-47 Dr. Albrecht was successful in convincing me that I should come to Alaska to help organize and carry on this program. He was greatly aided by Ernest Gruening, who was then Governor of Alaska. Having previously visited Alaska in 1926, I had an unusual amount of interest in the possibilities of the Territory, but I do not believe that I would have made the decision to go to Alaska without the full-hearted cooperation of my courageous wife. Without the continued and whole-hearted cooperation of the Governor of Alaska, the Commissioner of Health, and my own family and many friends, we could not have instituted this program.

In accordance with this decision I arrived at the former Japonski Island Naval Air Station near Sitka in March 1947. This program was possible because of certain transfers of property from the U. S. Navy to the Alaska Native Service. It was agreed that the former Naval dispensary should be used for the treatment of crippled children in Alaska. The Alaska Native Service and the Alaska Department of Health entered into an agreement which stated that the Alaska Department of Health would furnish an orthopedic surgeon and an orthopedic nursing supervisor. The Alaska Native Service was to furnish and maintain the physical facilities.

When I arrived, I found approximately 25 crippled children in the hospital. Most of them were Alaska Natives. About 95% of the diseases were the result of tuberculosis of the bones and joints.

When the Navy departed, they removed a good share of the medical equipment, and the buildings had fallen into disrepair. There was a distinct lack of enthusiasm by both Government and private parties concerning the idea of an orthopedic program for the Territory. I was acutely aware of my lack of knowledge in the treatment of tuberculosis of the bones and joints. I would be less than honest if I did not admit that during the first two months of my stay in Alaska, I gave serious consideration to resigning because I believed that the difficulties were insurmountable. You, who have worked with crippled children, will understand when I tell you that it was next to impossible for me to give up after working with these children for a very short period of time.

My first task was to hold extensive clinics throughout Alaska, and this, plus the work of the 1946 survey, resulted in an initial backlog of 440 critical patients who needed hospitalization at the earliest possible date.

At the beginning I used the then accepted methods of immobilization, bed rest and general care for tuberculosis of the bones and joints. My observations led me to believe that this resulted in undue crippling and unnecessarily long periods of hospitalization. Study trips to various centers convinced me that our common knowledge of this disease should be improved. Exception to this was the work that

was being done by C. Howard Hatcher, M.D., of Chicago and David Bosworth, M.D., of New York. I am indebted to them for continued help and stimulation. Mary S. Sherman, M.D., then associate in orthopedics at the University of Chicago,, Robert D. Ray, M.D., then Head of the Orthopedic Section, University of Washington. Austin T. Moore, M.D., of Columbia, S. C., and the late Sterling Bunnell, M.D. of San Francisco, California, specialists of international note, acted as consultants and actually came to Alaska where they helped with field clinics and surgery. To them we owe a deep debt.

In 1948 we performed the first major surgery in a field hospital at Bethel on about 20 patients. In 1949 similar treatment was carried out in Kotzebue. In 1950 we began our first experiments on the use of streptomycin. The results have been published.

By this time we believed that much earlier and more radical surgery resulted in less residual crippling and in a decrease in patient hospital time. Early fusion was being used in an increasing number of cases and we began to study the use of bone bank material for major fusions on very small children and in those so debilitated that they would not tolerate the extra trauma necessary to obtain autogenous bone. These experiments led to the use of rib material obtained from the Department of Thoracic Surgery at Mt. Edgecumbe. We agree with others that fresh autogenous bone is preferable, but the use of frozen bone bank material has aided our program materially.

In 1951 we successfully transported frozen bone by using carbon dioxide and an insulated cabinet. This bone was used to do major fusions in several cases in Kotzebue, some 1500 miles away from the orthopedic center. Successful fusions were eventually obtained in most of these cases. E. S. Rabeau, M.D., medical officer in charge of the Kotzebue Alaska Native Service hospital was largely responsible for the success of this field operation.

Additional developments in the program have been the training of residents in orthopedic surgery from the University of Washington and the University of Illinois. Consulting orthopedists were William J. Mills, Jr., M.D., of Anchorage and Paul B. Haggland. M.D., of Fairbanks. They have done outstanding work.

We have treated and discharged approximately 1000 patients and the backlog of patients with tuberculosis of the bones and joints has decreased. The pathology presented by the patients in the hospital has changed. Tuberculosis of the bones and joints is encountered less frequently and we see an increasing proportion of orthopedic problems of a more common type. At the beginning we anticipated a long stay in the hospital for each tuberculosis patient, sometimes running into years. At the present time we calculate their stay in months. Another change is a result of early diagnosis of tuberculous joints. These cases are being treated with antituberculosis drugs, and we do not fuse unless the joint destruction is severe. This does not apply to tuberculosis of the spine.

We are now experimenting with a new surgical approach to the problem of scoliosis in certain selected cases and will give a report on this when we have acquired sufficient knowledge.

In 1955 the hospital facilities of the Alaska Native Service were transferred to the United States Public Health Service. The Alaska Department of Health is responsible only for the "non-Native" beneficiary.

Our greatest failure in Alaska has been our lack of success in establishing a rehabilitation or an habilitation program following hospitalization. We believe that there is much to be done with education, occupational therapy, and vocational training which might enable patients to become self-sufficient. We will continue our efforts to stimulate such a program.

In 1956 I resigned as a full-time orthopedist to re-enter private practice. Acting as a consultant, I have viewed with considerable alarm the decrease in orthopedic field clinics and organized hospital treatment. The orthopedic residency program has been discontinued, and there has been no replacement of a full-time orthopedist. Our master-file at Mt. Edgecumbe containing the essential data on approximately 7000 orthopedic cases is now about 2 years behind. The data arriving in field and hospital reports will not be replaceable. Unless definitive steps are taken to re-organize the program, its future is in doubt. This program should be unified and centrally directed without regard for race. Competent orthopedists should direct the orthopedic care. In my opinion, the need for a continuing program is urgent. Without such a program we may again find an increasing number of people crippled and dependent on our tax funds for support.

ARCTIC HEALTH RESEARCH CENTER, An Introduction

A. B. COLYAR, M.D.

ANCHORAGE

Arctic Health Research Center, U. S. Public Health Service

The Arctic Health Research Center at Anchorage, Alaska is a permanent field station of the U. S. Public Health Service. The main laboratories are located in downtown Anchorage. Other facilities are located in and around Anchorage, at Eklutna, Fairbanks, and in Gambell on St. Lawrence Island.

The station is a branch within the Bureau of State Services, one of the four bureaus of the U. S. Public Health Service, Department of Health, Education, and Welfare. Locally, it is directed by a medical officer and consists of six research sections, a research library and necessary auxiliary services. Each of the research sections is directed by a principal investigator selected for his experience in and knowledge of his particular field.

BACKGROUND

As early as 1936 the Public Health Service assigned medical officers, nurses and engineers to the Alaska Department of Health. Although the need for medical and biological research in relation to public health had been recognized for many years, it was not until 1946 that the first official expression of the need came. In that year Secretary of Interior, Julius Krug, asked the American Medical Association to investigate health conditions in Alaska. Two years later Dr. Arthur Bernstein, Chairman of the Special Alaska Committee of the American Medical Association, made the following statement to the House Sub-Committee on Appropriations:

> "When the committee completed its review of public health problems in Alaska, it concluded that there was a basic need for Arctic scientific investigations. The committee recommended that an Arctic institute of health be established for the study of the Arctic and its bearing on health, sanitation, nutrition, engineering, construction, food, clothing and footwear . . . and it is recommended that the United States Public Health Service and the Department of the Interior take an active part in instituting immediately Arctic scientific investigations, with the anticipated establishment of a permanent institute of health to continue these studies."

Research work began in 1948 when Congress requested that the Public Health Service establish a center in Alaska, and appropriated in excess of one million dollars for the first year. Most of this amount was designated for use by the Territorial Health Department for expanding existing health services. The Center thus became both a research organization and an office for administering special health grants and providing technical professional assistance to Alaska.

The research carried on by the Center is filling important gaps in our knowledge. Up to the time the Center was established information on health problems and biologic adaption to low-temperature environments was almost completely lacking. Modern science has delved deep into health problems in temperate and and tropical regions of the globe and, as a result, we now have many methods for coping with disease and conditions found in these regions. Certainly there is a need to increase our knowledge of colder areas. Only to the extent that hazards to health are explored and eliminated can Alaska and other parts of the far North attract a stable, home-seeking population. Obtaining basic information necessary for healthful living in low-temperature areas is thus the major objective of the Arctic Health Research Center.

PLANNING THE PROGRAM

Planning a program to study health problems of low-temperature areas involved consideration of a number of unusual factors. Prior to this time, most health investigations had been limited to sporadic and often unrelated expeditions sent to Alaska to investigate bits and pieces of a given problem, and had lacked the scope and continuity necessary for sound planning and development. The cost of short-term expeditions was great and is still excessive. Cumulative data is needed and requires continuous year-round observations. Background information on the natural environment of the North is essential to permanent settlement. For these reasons the Center was located in Alaska.

The investigative program is carried on largely by a resident staff devoting full time to research. Development of auxiliary services, such as the research library, statistical services, instrument shop and animal colonies, has made the Center relatively self sufficient, making it unnecessary for the staff

to rely heavily on sources outside Alaska. Other research groups and local physicians have made good use of the excellent library services.

Limited resources have made it necessary to concentrate on fields presenting the greatest immediate health problems. An attempt has been made to obtain some balance between basic research, such as biochemistry and physiology, and developmental research, examples of which include studies in water supply, waste disposal and insect control. Under the heading of what might be called background research, are studies of animal-borne diseases transmissible to man and the study of distribution and life habits of biting insects.

When investigative activities were first undertaken, the almost complete lack of information pertaining to Alaska in the various scientific fields required the staff to start from scratch, painstakingly collecting and sifting the few available data and making on-the-spot surveys.

EXAMPLES OF STUDIES

The following examples of problems which have been or are now under study best illustrate program interests:

Biochemistry and Nutrition

Unusual dietary patterns of Eskimos and Indians have been of interest for many years. Current surveys will give detailed information on the diet of a large group of aboriginal Alaskans. Correlated with this information will be data on serum cholesterol, prevalence of coronary disease and, eventually, occurrence of atherosclerosis. This information will provide another segment of the epidemiology of atherosclerotic heart disease now being pieced together from all parts of the world.

Other studies have revealed the occurrence of chronic iron-deficiency anemia among large groups of fish-eating Eskimos of Alaska, together with Vitamin A deficiency. The apparent rarity of diabetes mellitus among older Eskimos is not yet explained. Methemoglobinemia, a rare disorder, congenitally acquired, is fairly common among Kuskokwim Eskimos. The disease is characterized by cyanosis, and is precipitated by deficiency of Vitamin C.

Environmental Sanitation

Community and household water supplies and sewage disposal methods present the most costly problems found in cold regions. A special design for municipal water distribution has been worked out on the basis of work done at the Center and installed in Fairbanks with good results at great saving. Effects of permafrost and long winter freeze on water storage and supply and on waste disposal continue to occupy the attention of egineers in northern Alaska.

Practical methods for detection of toxic clams and mussels is being sought. A simple test would be a boon to the industry in Alaska and elsewhere.

Housing design and testing for suitability of construction and occupancy under arctic conditions is a project now in its final stages. Use of local materials and simple design for construction by local labor are practical criteria.

Entomology

Survey for identification of Alaskan biting insects, determination of their life sycles, breeding habits and distribution, as a basis for development of practical control measures, has occupied this section for several years. A workable device for control of insects around camps, households and other such small areas was designed and tested in the early years of the Center's operations. Although the Center no longer supports insect control projects, consultation on methods is still given.

Epidemiology

A program for home treatment of tuberculosis was started by the Center among Eskimos and Indians using Isoniazid and PAS, beginning in 1954, in cooperation with the Alaska Native Service (now Alaska Native Health Service) and the Alaska Department of Health. Currently this research group is testing the prophylactic value against tuberculosis of Isoniazid and is beginning an epidemiological study of phlyctenulosis.

Shigella and fish tapeworm have been found to predominate among Alaskan aborigines as causes of enteric diseases. Isolation of a number of viral agents suggests an additional causal factor in enteric disease.

Epidemics of common infectious diseases as well as outbreaks of unidentified febrile disease have been studied. Methods for obtaining reports of morbidity in remote villages have included training and use of lay reporters.

Physiology

Adaption of animals and man to arctic environments is best studied in nature. AHRC biologists have studied cold-adapted animals in Alaska, Canada and Norway. Physiological mechanism of man's adjustment to cold is now the subject of a series of field and laboratory projects in collaboration with scientists from Canada, Norway, Sweden and England.

Zoonotic Diseases

Diseases of animals transmissible to man flourish in all climates and countries. In Alaska practically nothing was known of this group of diseases until a few years ago. Examination of several thousand animal carcasses obtained from trappers and hunters has furnished a good idea of animal diseases of para-

sitic origin. A number of parasites of animals affecting man and domestic animals are of public health importance.

The distribution within Alaska of alveolar hydatid disease and the life cycle of the causal parasite has been worked out by investigators on this program. Studies in both field and laboratory continue on hydatid diseases, fish tapeworm, trichinosis, rabies, tularemia and other diseases commonly found in Alaskan animals.

Clinical and Social Science Studies

Prevalence of coronary heart disease has been determined in a group of over 400 Eskimos and Indians, aged 35 and over. Data is now being analyzed and will be published in the next few months.

Social and psychological problems of Eskimos hospitalized for treatment of tuberculosis in Seattle sanitoria were studied. Results were reported in the American Journal of Nursing.

COOPERATIVE ACTIVITIES

State and federal agencies both within and outside Alaska cooperate with the Center's staff in carrying out many projects. Among them are the Alaska Department of Health, the University of Alaska, and the Department of Education, the Alaska Native Health Service, Bureau of Indian Affairs, the Alaska Command and its Arctic Aeromedical Laboratory, U. S. Fish and Wildlife Service, and many others. Close contact is maintained with a number of universities and institutions interested in the Arctic. Many individual physicians have been most generous in connection with infectious disease studies, giving freely of their time on a number of projects.

ALASKAN PSYCHIATRY–Interim Report

J. RAY LANGDON, M.D.

Assistant Chief, Section of Mental Health, Alaska Department of Health
ANCHORAGE

In the two years since Alaska assumed its own authority (and responsibility) for the mentally ill of the Territory-become-State some progress has been made, although to date not much of this is apparent.

Although Alaska assumed responsibility on February 22, 1957, and the legislature passed the Mental Health Act on July 1, 1957, no psychiatrists were employed by Alaska between February 1, 1957 when Oscar Hubbard, M.D., departed and February 21, 1958 when J. B. K. Smith, M.D., arrived in Juneau. Thus the burden of initiating procedures under the Mental Health Act and supervising contractual agreements with hospitals in Alaska as well as with Morningside Hospital in Portland, Oregon, fell upon the Department of Health with only a skeleton crew in the Section of Mental Health. Even in the year since then the addition of two psychiatrists has so far served merely to underline the problems present.

For many years much emphasis has been placed on tuberculosis as a major problem so far as public medicine is concerned, and at present these efforts seem to be paying off. In the same period much heat has been devoted to mental health, but little light developed except for the substitution of the archaic federal statute by the modern Alaska Mental Health Act. As severe psychiatric problems used to be regarded as legal and police, rather than medical matters, Alaskan physicians were frustrated in attempts to deal with these patients. In addition less severe psychiatric illnesses could not be adequately referred unless the patient was sent Outside, so this again has required that physicians must either do without consultation or else agree to the possibility of losing the patient entirely because of the expense and other problems involved in such referrals Outside.

It seems then that the Alaska Mental Health Authority (under the Section of Mental Health of the Alaska Department of Health) has a threefold clinical responsibility: (1) Providing hospitalization and treatment for those patients with psychoses or similarly severe mental illness or retardation; (2) Affording consultation as requested, when possible, to private patients of Alaska physicians until such time as enough psychiatrists in private practice are available for this; (3) Providing consultative services to various public agencies such as courts, schools, police, and welfare where psychiatric recommendations are needed to assist these agencies in their functions.

To provide hospitalization and treatment the Mental Health Authority contracts with Morningside Hospital and with general hospitals in Alaska for brief care of psychiatric patients. Meanwhile, plans continue for the Anchorage psychiatric center which it is hoped will be in construction in 1960 and ready to receive patients in 1961. If possible a small psychiatric unit will be developed in the Anchorage Native Health Service Hospital in 1959 to serve as an acute treatment unit and training nucleus for the staff of the larger facility.

To provide consultation services, Section of Mental Health offices are presently functioning in Juneau and Anchorage. The Juneau office has been able to provide some service to the rest of Southeast Alaska and the Anchorage personnel have been making monthly visits to Fairbanks as well as seeing patients from out of town in Anchorage when possible. It is hoped that additional psychiatrists, when recruited, will feel encouraged by the Mental Health Authority and by the medical community to enter private practice, at first part-time and later on a full-time basis. It is hoped also that larger communities such as Anchorage and Fairbanks will gradually develop local, community-backed psychiatric clinics for patients not quite indigent but unable to support full cost.

Public health and preventive medicine activities of the Mental Health Authority are outlined now, but their implementation will probably be slow because of the acute clinical needs and the national shortage of personnel (and knowledge). Public education and research are the main areas of emphasis in this aspect of the program. Statistics on mental illness are notoriously difficult to compile and compare in any area, but this is particularly true in Alaska so far as the United States is concerned. The number of patients publicly hospitalized is available but probably is relatively meaningless because of the previous difficulty with which this was accomplished and the slowness with which knowledge of the new law's provisions are disseminated. Private psychiatric hospitalization is essentially not done at this time in Alaska, and no figures are available for those hospitalized elsewhere.

Though there are undoubtedly numerous and varying reasons for Alaska's markedly elevated mortality rate from violent causes (including suicide, homicide, accidents, and those listed as due to alcoholism), it can safely be assumed that mental and emotional disorders play a significant role in this rate. Thus it is probable that increasing possibilities of treatment, both public and private, will help reduce this rate while the programs of education and research gradually lead to earlier detection of illness as well as possible methods of prevention.

It should be recognized in all these aspects of a mental health program that organized medicine as a whole and not just the specialty of psychiatry, which is still negligible in Alaska, must assist in leadership capacity in a teamwork approach on mental illness and its close relatives—crime, juvenile delinquency, family disruption, and economic instability and depression.

Thus the Alaska Mental Health Authority, despite its infancy, its present ridiculous incapacity to handle even its most pressing problems, and the obvious roadblocks of public apathy, politics, and bureaucracy, must look upon its role in the new state as that of a catalyst in the development of a therapeutic, and ultimately an essentially healthy community.

Though we know that such statements are a bit grandiose and that significant progress in this direction may not be detectable for years or even decades, it is hoped by the time of the next progress report that some definite advances will have been made, not only in the public Mental Health Authority, but also in the medical and lay communities, toward these goals.

WOMEN'S AUXILIARY

A News Column Compiled by

MRS. VERNON CATES

1958-59 OFFICERS OF THE WOMEN'S AUXILIARY TO THE ALASKA STATE MEDICAL ASSOCIATION

President—Mrs. John Clements ..... Juneau
Vice-President—Mrs. William Charteris ..... Sitka
President Elect—Mrs. Francis Phillips ..... Anchorage
Secretary-Treasurer—Mrs. Harry Leer ..... Juneau
Chairman, American Medical Educational Foundation—Mrs. John Clements ..... Juneau
Chairman, Scholarship Committee—Mrs. Paul Haggland ..... Fairbanks

MILEPOSTS TO SUCCESS

— A Message to the Women's Auxiliary to the Alaska State Medical Association

Mrs. E. Arthur Underwood,
President of the Women's Auxiliary to the American Medical Association

1. **We are an Auxiliary.** We cooperate with our husbands in the American Medical Association in reaching their objectives. They lead. We are the liaison. We should be the golden thread which unites us with other individuals and our organization with other forces concerned with health. If we do our part well, the relationship is good.

2. **"Getting to Know You"** applies to more than romance. Knowing the wives of other physicians is a beginning. A personal invitation should be extended to every potential member. If all participate in some aspect of Auxiliary work, in the field that fits their individual energies and abilities, two things are accomplished: Our members are active—the key to success; and we achieve unity, the key to progress.

3. **Unity Within Your Community.** Our primary objective is "to cultivate friendly relations and promote mutual understanding among physicians' families." As F. J. L. Blasingame, M.D., general manager of A.M.A., stated, "The association will need to increase its communications with its members and the auxiliary. By keeping our membership informed, we can expect to strengthen our unity and to increase our effectiveness in leadership in health matters." With the approval of your Advisory group, select for action a program which fits the needs of your community. In Alaska, where frequently there is one physician serving a vast area, he is the First Citizen. As wives of these First Citizens, you are expected to share this leadership in health education. Procedure will vary with the immediate circumstances, but the basic objective—better health for all—will remain.

4. **The Cache.** One health educator has stated that a health magazine is the most important undertaking in a program of health education. The Members at Large—the wives of physicians in remote areas peculiar to Alaska—can do great service through gift subscriptions to **Today's Health.** This reminds people twelve times a year that health is important.

Films on a wide variety of subjects related to health: safety, paramedical careers, civil defense, mental health, and many others, are available from the Auxiliary Central Office. Would you like to direct a volunteer cast? Playlets are available from your National Program Chairman. These will offer diversion on many a cold winter evening—taking part is fun—your audience may acquire a new view of you along with a few health facts—and the sharing is important.

As a visitor I greatly admired the spirit and participation in your projects by other members of the community. This is active leadership in community health.

5. **Service to your Auxiliary.** By participating in worthwhile social and community activities as a physicians wife and a member of the Auxiliary, you also serve the Auxiliary.

6. **Auxiliary Meetings.** Some of our most successful Auxiliaries meet once or twice a year, a project is selected, plans are made, and each member pursues the course in her own community. Last year you selected a film on Safety which was shown in all the schools in two areas.

7. **Top of the Totem Pole.** Last year it was my privilege to attend the meeting of the Woman's Auxiliary to the Alaska Territorial Medical Association. This year—to the Woman's Auxiliary to the Alaska State Medical Association to present a special award —the National award for the second highest per capita contribution to the American Medical Education Foundation.

8. **Summit.** "Bring me men to match my mountains" is the caption under the beautiful picture of Mt. McKinley at the Fairbanks airport. Wives of Alaskan physicians participate in so many fields of community service that we cannot mention them all. This is the golden thread of liaison—up here it's a rope—and the women match the men. Service has its own unique reward.

PRESIDENT'S MESSAGE

Mrs. John Clements

President of the Woman's Auxiliary to the Alaska State Medical Association

Remember that the Woman's Auxiliary to the Alaska State Medical Association will meet in Juneau on March 19, 20 and 21. All doctors' wives are invited to attend.

Mrs. E. Arthur Underwood, National President of the Woman's Auxiliary to the American Medical Association, plans to be in Juneau for this meeting, and I am sure you will all enjoy the opportunity of becoming better acquainted with her.

The following tentative program has been scheduled:

THURSDAY, MARCH 19—

Registration ..... 2:00 P.M.

BARANOF HOTEL LOUNGE

Tea by St. Ann's Hospital Guild ..... 3:00 P.M.

ST. ANN'S HOSPITAL

FRIDAY, MARCH 20—

Luncheon at Dr. R. H. Leer's home, Douglas highway ..... 12:30 P.M.

Meeting of the Woman's Auxiliary to the Alaska State Medical Association

Guest Speaker—Mrs. E. Arthur Underwood, National President of the Women's Auxiliary to the AMERICAN MEDICAL ASSOCIATION

COMMITTEES

Greeting: Mesdames Clements, Gibson, H, Whitehead.

Tea: Mesdames Carter, Rude, Sperry, Wilde

Arrangements: Mesdames Blanton, Gibson (J), Leer, Smith

ALASKA MEDICAL AUXILIARY DUES

Mrs. Francis J. Phillips, President-Elect Woman's Auxiliary to the Alaska State Medical Association

No longer can we "live alone and like it!" We are a big part of the forty-nine states. As medical auxiliary members, we can help promote the cause of better medicine in this new state by joining the Woman's Auxiliary to the Alaska State Medical Association. In joining, we automatically become members of the national, or American Medical Auxiliary, which in turn, supports the state auxiliary, supplying it with information and material such as legislative bulletins pertaining to health, film listings on civil defense, safety, mental health.

State dues are five dollars. One dollar is sent to national for each member, one dollar for the **Bulletin** (published four times a year), and three dollars stays in the state treasury to be used for Paramedical Scholarships for some future Alaska nurses, for contributions to the American Medical Educational Foundation for medical schools (Alaska Medical Auxiliary contributed $244.50 last year), for operational expense.

We can be active, interested members. Join your auxiliary now! Mail dues ($5.00) to Mrs. R. Harrison Leer, secretary-treasurer, P. O. Box 2597, Juneau, Alaska, by March 15, 1959.

AUXILIARY NEWS

ANCHORAGE: Upon the request of the Anchorage Medical Society, seventeen Physician's wives met, on March 20, 1958, for the purpose of reactivating and reorganizing the Auxiliary. Doctor Milo Fritz, representing the Anchorage Medical Society, spoke on the need for the Woman's Auxiliary and pledged the full support of the Medical Society. A nominating committee was elected and requested to present their nominees at the next meeting of the Auxiliary.

The first official meeting of the Anchorage Medical Society Auxiliary was held on April 28, 1958 and the following officers nominated and elected: President—Mrs. Vernon Cates; Vice President—Mrs. Francis Phillips; Corresponding Secretary—Mrs. James Fitzpatrick; Recording Secretary —Mrs. Lester Margetts; Treasurer—Mrs. Royce Morgan; Board Members—Mrs. C. E. Chenoweth and Mrs. Asa Martin.

The first few meetings of the Auxiliary were spent in organizational work and the drawing up of our Constitution and By-Laws. The Anchorage Medical Society Auxiliary now totals twenty-five active, paid-up members.

FAIRBANKS: The Fairbanks Auxiliary has three new members:

Mrs. Donald Tatum from Oregon City, Ore.

Mrs. Art Schiable who was married to Dr. Schiable in New York City on Christmas day.

Mrs. James Dohm from Brian, Ohio. Dr. and Mrs. Dohm came to Fairbanks following three years of service in Japan.

The major project of the local auxiliary members was a pot luck supper, profits of which were donated to A.M.E.F.

SEWARD (by Mrs. Joseph Deisher): Gladys Underwood, President of our Woman's Auxiliary to the American Medical Association suggested on the Presidents Page of the January 1959 "Bulletin" that "the real art of living is in the beginning where you are." When I read this, I realized that what is being done in the small communities of our new state is not as trivial as I had first supposed.

In Seward, a community of about 2100, there are three physicians with their families. Individual interests of these families just naturally make it possible for us wives to each contact a different group of people. Thus we each begin where she is; be it Church, P.T.A., Hospital Auxiliary, Woman's Club or

any one of 27 other local clubs; to carry out the objectives which would be officially ours if we were organized as an Auxiliary Unit.

True, this is not a formally planned activity, we don't meet often, but we all feel that by using and working through one or more of the existing organizations for the benefit of the whole community, we are most effectively serving.

As members of the P.T.A. we help the Public Health Nurse check eyes, ears, and give immunizations. As Chairman of the Cancer Unit we distribute Educational Material and guide people to agencies which can help them. In the Hospital Auxiliary we assumed responsibility for the interior decoration of our new Hospital. In the coming year, we will be available to help in many ways as the new Hospital becomes a Civic enterprise after being run by the Woman's Division of Christian Service of the Methodist Church for twenty-six years.

SITKA: Since the recent organization and inauguration of the Sitka-Mt. Edgecumbe Medical Association, the Sitka medical wives have discussed among themselves and reached an almost unanimous conclusion that the time has arrived for formation of a local Auxiliary. A cohesive group even as small as this one will necessarily be, should be able on occasion to initiate and follow through projects and aims which inevitably fall by the wayside when we plod along as the busy preoccupied individuals all of us seem to be. So—the Sitka gals are open and receptive for prods, suggestions, instructions, directions and what have you.

CHIT - CHAT

Anchorage—Mrs. William Caughran and Mrs. William Rader were hostesses at a tea honoring Mrs. Calvin Johnson on January 27. Dr. and Mrs. Johnson were married here recently.

Cordova—Although they miss their Alaskan friends, Dr. and Mrs. Raymond Coffin are happy with their home and new office in Mukilteo, Washington. Dr. Coffin was replaced by Dr. Joseph Tedesco in Cordova.

Fairbanks—Dr. and Mrs. Joe Ribar recently spent some time in Tacoma, where they helped Dr. Ribar's parents celebrate their golden wedding.

Mrs. Joe Ribar has been elected president of the Fairbanks Hospital Auxiliary.

All of Fairbanks was saddened by the death of Mrs. Huge Fate's father, Mr. Thomas Quirk. The Quirk's were pioneers of the area.

Dr. and Mrs. Henry Storrs were parents of a new son born on April 26.

Mrs. Lawrence Dunlap had a vacation in October when she flew to San Bernadino to visit her parents.

A daughter was born to Dr. and Mrs. James Lundquist on September 14.

The Haggland twins spent the holiday college vacation at home with their parents.

Mrs. John Weston is busy as president of the Farthest North Girl Scout Council.

Dr. and Mrs. Kenneth Kaisch spent their holiday at Chena Hot Spring. Recently much of their time has been taken up curling.

Kodiak—Dr. and Mrs. Al Holmes Johnson, residents of Kodiak for twenty years, left Kodiak in September, 1958 for a world wide vacation. They left Los Angeles on a Holland freighter bound for Capetown, South Africa. They stayed with Dr. Johnson's sister for a month in Capetown. They are now motoring through Africa, and plan to sail from Mombasa, (Kenya) on an Italian liner on February 11, for Venice, Italy. After several months touring Europe, Dr. and Mrs. Johnson will return to Kodiak.

Dr. and Mrs. J. Bruce Keers from Brooklyn, New York joined the Holmes Johnson Clinic in June, 1958. The Keers are ardent skiers, skaters, sailors and lovers of seafood.

Dr. and Mrs. Bob Johnson recently purchased skin diving gear. They are thoroughly enjoying their swims in the Pacific and are most anxious to become more familiar with this sport.

Palmer—Dr. and Mrs. Vincent Hume and family are in good health following an experience they will never forget. While driving across a local lake, the ice broke and their car plunged into the water. Fortunately the family of seven including a small baby reached safety before the car went to the bottom.

Seldovia—Dr. and Mrs. Russell Jackson are busy building their home in Seldovia. At the same time Dr. Jackson is enjoying practice there and he and his sons take advantage of the excellent hunting and fishing opportunities in the area.

Sitka—Mrs. Phil (Mildred) Moore has maintained a full-time job as Dr. Phil's office nurse ever since he opened his Orthopedic clinic in Sitka. In the past year, Dr. T. M. Moore (no relation), has joined Dr. Phil, making the Moore Clinic **really** the Moore Clinic, so that one nowadays speaks of Dr. Phil or Dr. T. M. instead of Dr. Moore. Dr. T. M.'s wife Shirley will soon be an active auxiliary member. She is the mother of a four-year-old and a two-year-old, and still finds time and energy to put in considerable time doing secretarial work for the clinic. The new Moores have come to Sitka from St. Louis.

Mrs. William (Sue) Charteris is the envy of all at the moment. Shortly after Christmas she flew to Miami, Florida where her sister and brother-in-law Kathryn and Stockton Webb are readying their new sailing ketch, **Sea Otter**, for the leisurely return to

Sitka. Ot last reports they were about to head for the Bahamas and some shakedown sailing.

In July of 1958 Barbara Shuler, daughter of Dr. Bob and Loel Shuler, underwent successful surgery for a patent ductus at Virginia Mason Hospital in Seattle. Her subsequent robust health and vigor are truly rewarding.

The Sitka Community Hospital Auxiliary, a most valuable service organization, was formed during the year and has, of course, created a spot for the special abilities and concerns of physician's wives to be effectively utilized. Probably the great benefit of the Hospital Auxiliary is its position as liaison between the hospital and the multitudinous local service clubs, and channeling the community willingness to assist with hospital needs toward maximum benefit and efficiency.

MUKTUK MORSELS

A Column Devoted to Medical News in Alaska Compiled by

HELEN WHALEY, M.D.

GENERAL

Statehood has caused a tremendous surge of interest in the practice of Medicine in Alaska. Articles have appeared in such diversified publications as the New England Journal of Medicine, which presented an editorial on Alaska's health for the past ten years based on Metropolitan Life Insurance statistics, Medical Economics which gave a fairly complete survey of the coverage and opportunities for practice in Alaska,, Scope Newspaper which had a pictorial review of Dr. Milo Fritz and Dr. Rambo of New York City surveying the ENT problems among the Alaskan natives, and more recently Time magazine which gave a detailed report of the method of diagnosis and treatment via radio used by Doctor William Brownlee and Doctor Jean Persons of the Public Health Service at Bethel.

MEETINGS

There have been several interesting post-graduate sessions including the Lederle Laboratory Seminar in Anchorage February 21, 1959. This included a review of laboratory and office procedures and office treatment by James B. Donaldson, M.D., Associate Professor of Medicine, Hahnemann Medical College, Philadelphia, Pennsylvania; a ten year review of broad-spectrum antibiotics therapy by Vernon Knight, M.D., Associate Professor of Medicine, Vanderbilt University School of Medicine, Nashville, Tennessee; and a discussion of abdominal emergencies by Edward J. Beattie, Jr., M.D., Professor of Surgery, University of Illinois College of Medicine. Afternoon round-table discussions were moderated by Dr. Michael F. Beirne, pathologist at Providence Hospital; Dr. William J. Rader, Spenard; and Dr. Lester H. Margetts, president of the Medical Staff at Providence Hospital, Anchorage.

In September 1958, through the joint cooperation of the Alaska Heart Association and the Alaska Department of Health, cardiac clinics were held in Anchorage, and at Mt. Edgecumbe, Sitka, with Doctor Frank Gerbode, Professor of Thoracic Surgery; Doctor Herbert Hultgren, Associate Professor of Medicine; and Doctor Sarah Hochstetler, Assistant Professor of Radiology, all of Stanford University, San Francisco, California. Approximately one hundred patients of all ages with congenital and acquired heart disease were evaluated. The clinics were held at the USPHS Hospitals.

NEW POISON CONTROL CENTERS

Because of the increase in poison ingestion both in the larger communities and in the more remote bush areas, a need for central poison control centers became obvious this past year. Currently a center is being established at the Northward Drug Store in Fairbanks, Alaska and in the out-patient department at the Anchorage USPHS Hospital. Such centers have been established in the other states, because of the growing number and complexity of potentially poisonous ingredients in many manufactured products, most of which are difficult to trace readily. The central Poison Control Center in Washington, D. C., a branch of the USPHS, supplies these centers monthly

with a current list of new products. Telephone consultations are welcomed. Dr. Gloria Park has helped organize the Anchorage Center and Mark Fenton, Ann Berrigan, and Mel Allen, the Fairbanks Center. This provides a much needed service for all Alaskan physicians and represents a significant advance in medical care facilities.

LOCAL NEWS

FAIRBANKS—Doctor Elliot Coles, a 1949 graduate of John Hopkins Medical School, recently completed a residency in Hines, Illinois at the Veterans Administration Hospital. An orthopedist, he has joined the Doctor's Clinic. Dr. Donald E. Tatum of Oregon City, Oregon, an internist, and a graduate of the University of Oregon Medical School, has joined the Fairbanks Clinic and is serving as regional consultant to the Alaska Department of Health for the Chronic Disease of Children Program. A new girl was added to the Dr. James Lundquist family in October 1958. Dr. Paul Haggland became a Fellow of the American College of Surgeons. A recent wedding was that of Dr. Arthur J. Schaible and Miss Grace Bergh, a graduate of the Yale University Law School. They plan to fly over the Pole and to visit South Africa in the near future. Dr. John Weston is president of the Medical Society and recently attended a meeting in Sun Valley, Idaho. Two other new physicians are Dr. George Cloutier at the Doctor's Clinic and Dr. Dohm with the Fairbanks Clinic. These men are both generalists.

FORT YUKON—Dr. W. Burns Jones, Jr., continues to hold large and active out-patient clinics for the residents despite the closing of the Fort Yukon hospital, which was sponsored by the Episcopal Church.

BETHEL—Dr. Jean Persons, now Mrs. Ben Smit, formerly medical officer in charge of the Tanana hospital and prior to coming to Bethel, Chief of Pediatrics at the Anchorage USPHS Hospital, had a five pound seven ounce girl in January 1959. The Bethel area will have its first private practice physician when Dr. Harriet Jackson returns this summer. At the present time she is working with the Alaska Department of Health on an EENT demonstration project, surveying native villages between Bethel and McGrath. She was formerly the medical officer in charge of the Bethel USPHS Hospital.

NOME—For the past year Dr. William Woodcock, formerly of Hot Springs National Park Arkansas, and a general surgeon, has served as physician at the Maynard McDougal Memorial Hospital in Nome. He spent a brief visit with his family in Arkansas during the Christmas Season.

DILLINGHAM—Dr. George Wagnon, medical officer in charge of the USPHS Hospital, recently recently returned from a visit to the States. He flew his Stinson Station Wagon to Anchorage for repairs. Dr. John Libby, recently of Goldendale, Washington, plans to enter private practice in the near future. He is a graduate of the College of Medical Evangelists, Los Angeles, California, and formerly served as medical officer for the Alaska Native Service. He flies a Cessna 180.

GLENALLEN—Dr. James S. Pinneo returned to the Faith Hospital in Glenallen to join Dr. Chester L. Schneider after a year's leave of absence during which he took advanced residency training in Pennsylvania.

KENAI—Dr. Marion G. Goble, formerly of Kodiak, is a 1954 graduate of the State University of New York, College of Medicine, Brooklyn, New York. Dr. Goble was the first private physician to settle in the Kenai and Soldotna area, where she entered practice in the summer of 1958.

KODIAK—Dr. Bruce J. Keers, formerly of the U. S. Air Force and a graduate of the 1954 class of the State of New York Medical College, Brooklyn, joined the Holmes Johnson Clinic during the past year.

PALMER—Dr. Vincent Hume, who formerly practiced in Anchorage, moved to Palmer in August 1959. During the coming year Dr. Arthur J. Colberg's daughter Carol plans to enter the University of Washington Medical School. She is one of the two premedical students presently at the University of Alaska.

ANCHORAGE—Following a year's post-graduate work at the Palo Alto Clinic in California, Dr. Howard G. Romig has returned to the practice of obstetrics and gynecology. Dr. Merritt Starr, who has been on an extended tour around the world, recently returned from Europe and supposedly is now enroute to Mexico. Dr. Nancy Sydnam had her second child, a five pound, 9 ounce boy born prematurely and inadvertently at the Virginia Mason Clinic in Seattle during the course of a Christmas visit to her parents. Dr. Lester Margetts, a surgeon with the Doctors' Clinic, was recently elected Chief of Staff of Providence Hospital, and Dr. William J. Mills, Jr., was elected President of the Anchorage Medical Society. Dr. William Rader, brother of one of our State Representatives and an associate of Dr. William Caughran and Dr. Calvin Johnson of the Spenard Clinic, plans to leave for Cincinnati, Ohio in the summer of 1959 for a psychiatric residency.

SEWARD—Dr. Norman D. Hall, in practice for many years, has left the community to return to Washington. Dr. Joseph B. Deisher, attended a meeting in Chicago in October 1958 on Hynosis and its

use in medicine. He has used this method with encouraging results in obstetrics.

Dr. Ernest W. Gentles is dividing his time between the Alaska Department of Health, Tuberculosis Division in Anchorage during the absence of Dr. Robert Gardiner; the Seward Sanitarium; and private practice in Seward.

CORDOVA has a new physician, Dr. Joseph A. Tedesco, who took over from Dr. Coffin who had practiced in that area for many years. Dr. Coffin has returned to Mukilteo, Washington.

JUNEAU—Henry Wilde, an internist has joined the Juneau Clinic. He attended high school in Juneau and served as a medical resident in Edmonton, Canada, where he gained considerable experience in cardiac catheterization and cardiology. He is serving as a consultant to the Chronic Disease of Children program at present. Dr. John Clements of the Doctors' Clinic is President of the Juneau Medical Society. Dr. Donald Rude is obtaining further residency training. The Juneau USPHS Hospital has been closed. Native Service beneficiary patients are now hospitalized at St. Ann's, where Dr. George Sperry, USPHS, continues to offer them care. The basement of St. Ann's has been renovated as an out-patient department. Drs. C. Carter and William Blanton had a successful deer hunting trip in the Yakatat area last fall.

SITKA—In the Sitka area, there are several new physicians, including Dr. Tillman Moore, Jr., who is associated with Dr. Phillip Moore. He is a graduate of Washington University School of Medicine and recently completed a residency at Barnes Hospital, St Louis. Dr. David Sparling of the Alaska Department of Health and the Alaska Native Health Service at Mt. Edgecumbe attended the American Academy of Pediatrics Meeting in Chicago in October. He recently became a member of this group and attended several special sessions on crippled children's programs.

KETCHIKAN—Dr. A. N. Wilson's son Jim is in his last year of surgical residency at St. Vincent's Hospital in Portland, Oregon and Arthur, Jr. is presently interning at the Virginia Mason Clinic and plans to continue in anesthesia. Dr. John Stewart, who formerly practiced in the Anchorage area with the Anchorage Clinic, and later in Juneau, recently returned from Santa Barbara, California to establish a practice in Ketchikan. He is particularly interested in chest surgery. Dr. W. Turner, a graduate of the Baylor University Medical School in Houston, Texas is also a relative newcomer to the Ketchikan area.

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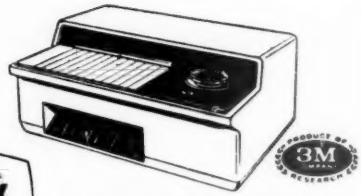

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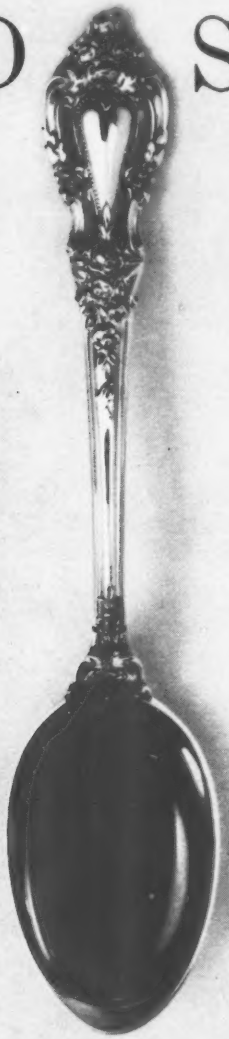

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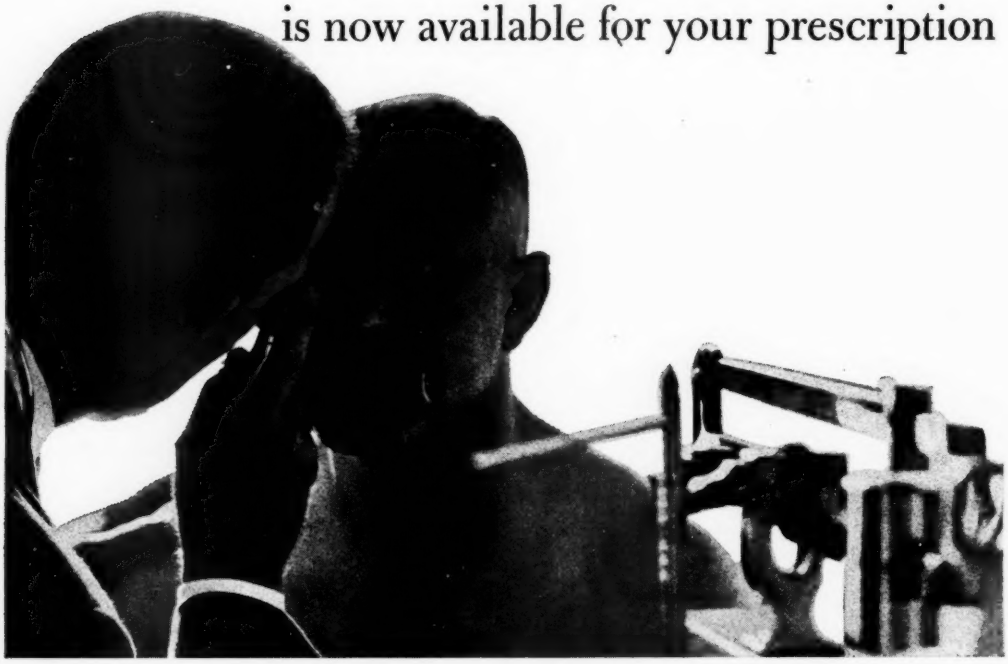

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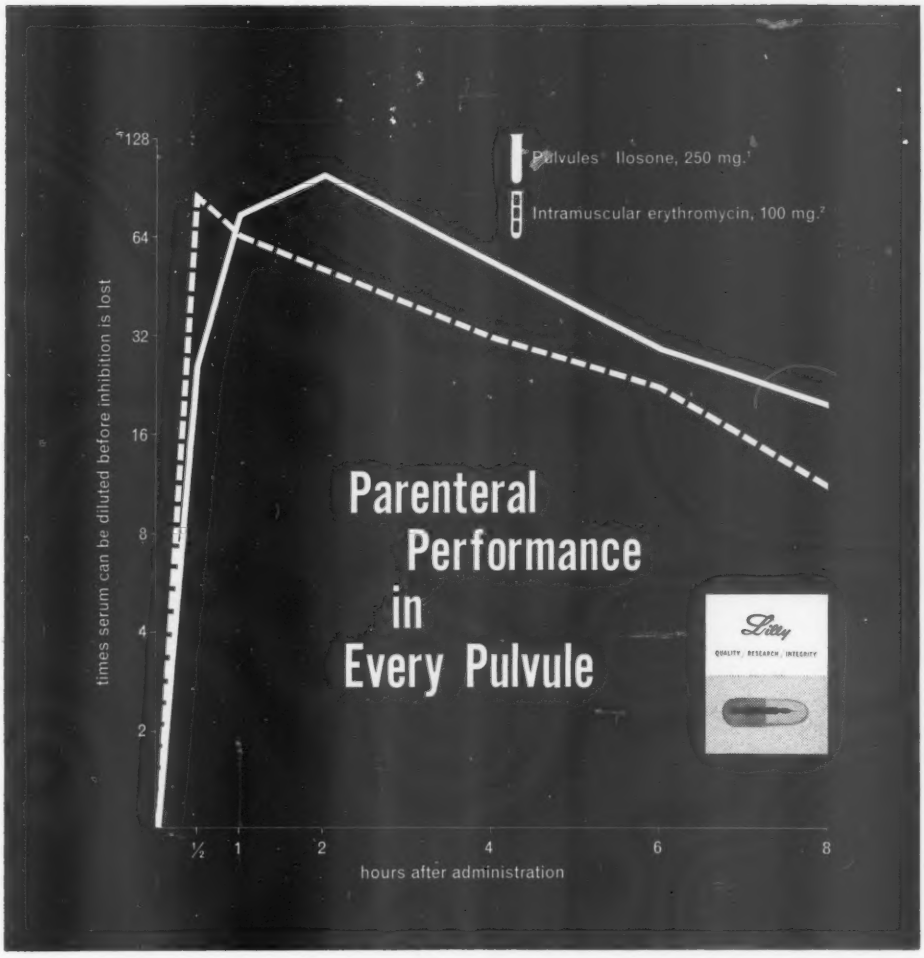

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1. Antibiotic Med. & Clin. Therapy, 5:609, 1958.
2. Data from Antibiotics Annual, p. 269, 1954-1955.

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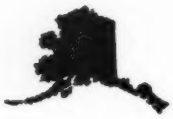

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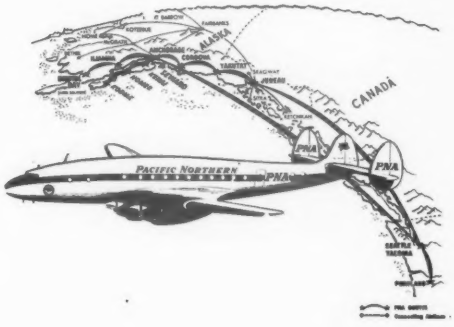

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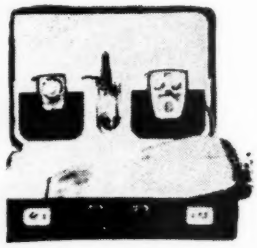

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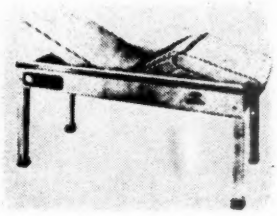

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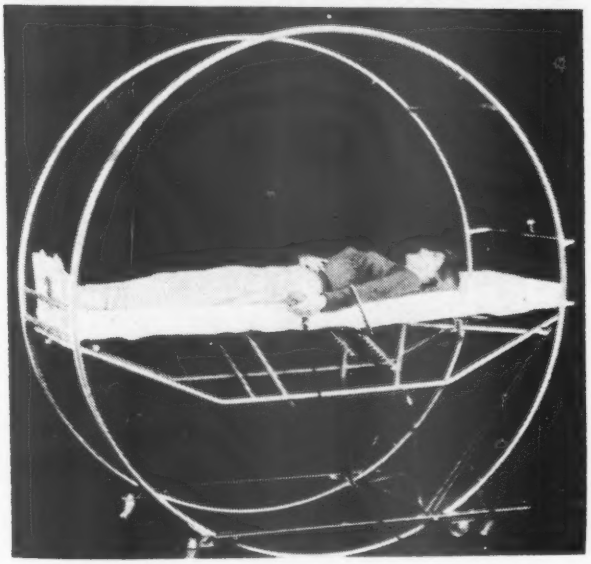

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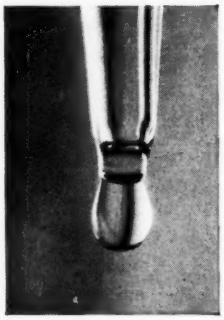

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PROGRAM
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of the
ALASKA STATE MEDICAL ASSOCIATION

JUNEAU

MARCH 19, 20, 21, 1959

MARCH 18—WEDNESDAY EVENING:

7:00 P.M.—Cocktails—Home of Dr. J. W. Gibson
8:00 P.M.—No Host Dinner—Mike's, Douglas

MARCH 19—THURSDAY:

9:00 A.M.—Registration
10:00 A.M.—Welcome—Dr. W. M. Whitehead, President, A.S.M.A.
10:20 A.M.—Greetings from Acting Governor Hugh Wade
10:25 A.M.—Greetings from Mayor of Juneau, M. L. MacSpadden
10:30 A.M.—Report from Department of Public Welfare, Mr. Henry Harmon, Director
Discussion
12:00 Noon—Lunch
1:30 P.M.—Business
2:00 P.M.—"Treatment of Patients Who Cough and Wheeze".
Dr. Edward H. Morgan, Seattle
Discussion
2:45 P.M.—Urinary Calculi as a Late Complication of Urinary Tract Tuberculosis.
Dr. Henry G. Storrs, Fairbanks
3:00 P.M.—Visit Exhibits
3:30 P.M.—"Skin Tumors—Benign and Malignant"
Dr. Robert A. Pommerening, Seattle
Discussion
4:15 P.M.—Adjourn
7:00 P.M.—Smorgasbord and Entertainment—Red Dog Saloon—Host Alaska State Medical Association

*Program for Wives and Women's Auxiliary on page 36.

MARCH 20—FRIDAY:

9:00 A.M.—Business
10:00 A.M.—Blood alcohol determination—Technique and Interpretation
Dr. Michael F. Beirne, Anchorage
10:30 A.M.—Report from Alaska Department of Health
Dr. Harry Gibson, Commissioner of Health
10:45 A.M.—Recess
11:00 A.M.—"Management of Eczematoid Dermatitis"
Dr. Robert A. Pommerening, Seattle
Discussion
12:00 Noon—Lunch
1:30 P.M.—Panel on Ulcerative Colitis & Irritable Bowel Syndrome
Moderator—Dr. Edward H. Morgan, Seattle
Internist—Dr. Henry Wilde, Juneau
Psychiatrist—Dr. John B. K. Smith, Juneau
Radiologist—Dr. Duane L. Drake, Anchorage
Surgeon—Dr. Lester Margetts, Anchorage
Pathologist—Dr. Michael F. Beirne, Anchorage
3:30 P.M.—Adjourn to Visit Legislature in Session.
6:30 P.M.—Cocktails
Home of Dr. W. M. Whitehead
8:00 P.M.—Banquet—Baranof Hotel

MARCH 21—SATURDAY:

9:00 A.M.—Report from Veterans Administration
Dr. Grace Field, Chief Medical Officer
9:15 A.M.—"Acute Respiratory Failure"
Dr. Edward H. Morgan, Seattle
Discussion
10:00 A.M.—Visit Exhibits
10:30 A.M.—Business
12:00 Noon—Lunch
1:30 P.M.—Late Sequelae of Saddle Block Anesthesia in Obstetrics
Dr. Eva F. Dodge, University of Arkansas
2:00 P.M.—X-Ray Diagnosis of Heart Disease
Dr. Henry Wilde, Juneau
2:30 P.M.—Recess
3:00 P.M.—Proposed Practical Nurses Training Program for Alaska
Mr. Howard Matthews, Dept. of Education
3:30 P.M.—Business
5:00 P.M.—Adjourn